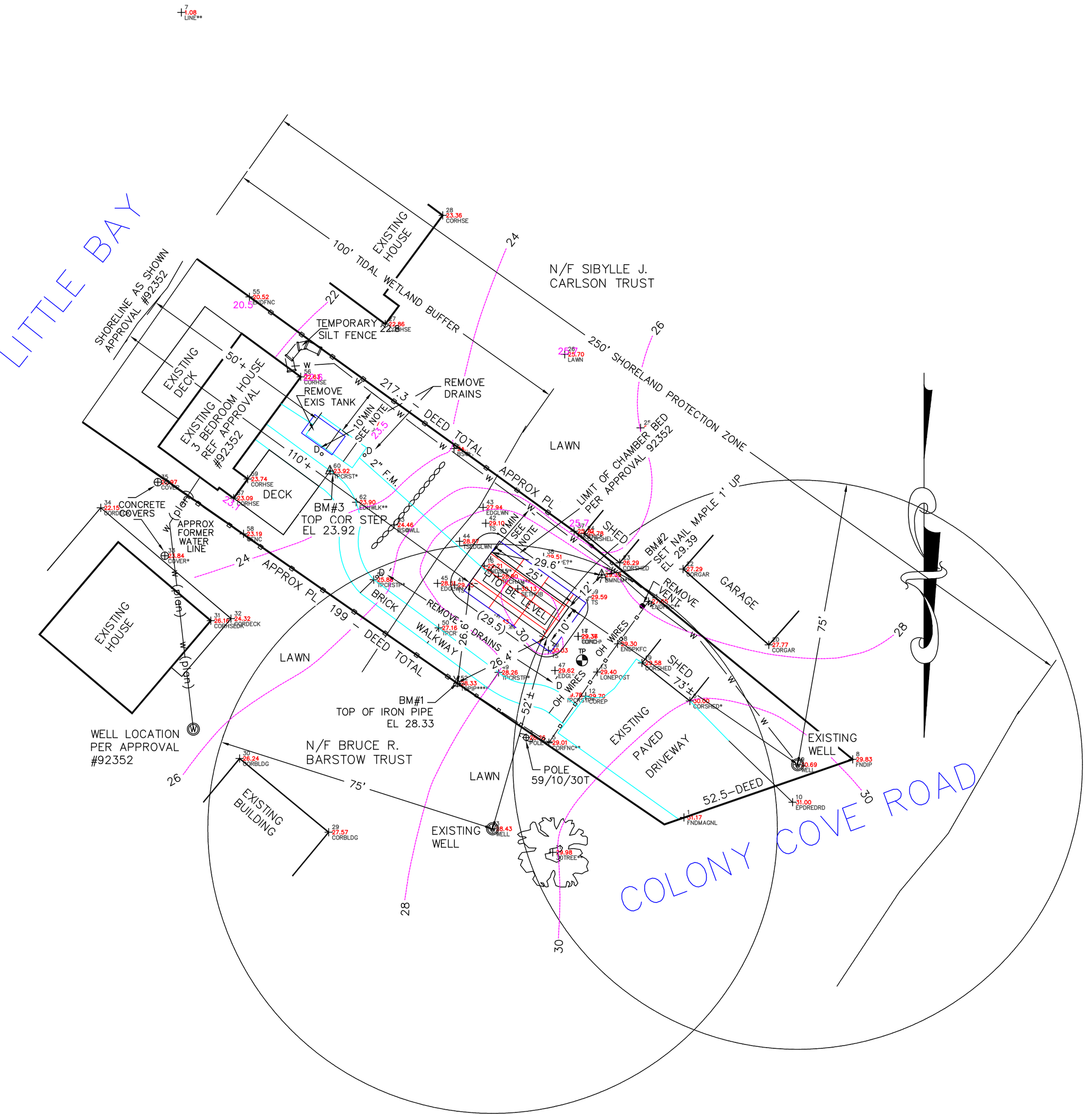


LITTLE BAY
COLONY COVE ROAD
N/F SIBYLLE J. CARLSON TRUST
N/F BRUCE R. BARSTOW TRUST
100' TIDAL WETLAND BUFFER
250' SHORELAND PROTECTION ZONE
SHORELINE AS SHOWN APPROVAL #92352
EXISTING HOUSE
EXISTING DECK
EXISTING 3 BEDROOM HOUSE REF APPROVAL #92352
TEMPORARY SILT FENCE
REMOVE EXIS TANK
REMOVE DRAINS
217.3 - DEED TOTAL
APPROX PL
LIMIT OF CHAMBER BED PER APPROVAL 92352
LAWN
DECK
BM#3 TOP COR STEP EL 23.92
CONCRETE COVERS
APPROX FORMER WATER LINE
BM#2 SET NAIL MAPLE 1' UP EL 29.39
GARAGE
REMOVE VENT
BRICK WALKWAY
REMOVE DRAINS
199 - DEED TOTAL
BM#1 TOP OF IRON PIPE EL 28.33
OH WIRES
EXISTING PAVED DRIVEWAY
EXISTING WELL
WELL LOCATION PER APPROVAL #92352
EXISTING BUILDING
POLE 59/10/30T
52.5-DEED
75'

Command= 210-
Point#, Start#-End# or G#= 1-100

| Bearing | Distance | Elev | Descrip | Pnt. | Northing | Easting | Type |
|---|---|---|---|---|---|---|---|
| ----------01-12-2025----- | | | | 11:51:56 | ---------- | ----------D:...\BMHOME7 | |
| | | 31.17 | FNDMAGNL | 1 | 5000.0000 | 5000.0000 | |
| | | 30.13 | SETHUB | 2 | 5060.2151 | 4956.2511 | TRA |
| | | 28.43 | WELL | 3 | 4997.0154 | 4949.5983 | SS |
| | | 28.26 | POLE*** | 4 | 5021.0215 | 4958.4445 | SS |
| | | 29.01 | CORFNC** | 5 | 5019.7034 | 4964.4216 | SS |
| | | 30.00 | CORSHED* | 6 | 5030.6799 | 5001.5698 | SS |
| | | 1.08 | LINE** | 7 | 5212.0826 | 4867.6333 | SS |
| | | 29.83 | FNDIP | 8 | 5015.3060 | 5044.4485 | SS |
| | | 30.69 | WELL | 9 | 5013.8953 | 5029.9540 | SS |
| | | 31.00 | EPDREDRD | 10 | 5003.9923 | 5028.6128 | SS |
| | | 29.98 | 30TREE** | 11 | 4990.7957 | 4965.4448 | SS |
| | | 29.70 | COREP | 12 | 5031.9292 | 4974.1366 | SS |
| | | 29.40 | LONEPOST | 13 | 5038.3093 | 4977.1429 | SS |
| | | 29.37 | TOPCHMB? | 14 | 5047.6850 | 4972.0948 | SS |
| | | 28.90 | TPCHAM** | 15 | 5063.5134 | 4951.1445 | SS |
| | | 29.21 | ENDSLV* | 16 | 5066.2391 | 4947.3896 | SS |
| | | 29.36 | CONC | 17 | 5047.6916 | 4972.1769 | SS |
| | | 29.30 | ENDPKFC | 18 | 5045.7298 | 4982.5109 | SS |
| | | 29.58 | CORSHED | 19 | 5040.6904 | 4988.9447 | SS |
| | | 27.77 | CORGAR | 20 | 5045.4649 | 5022.3452 | SS |
| | | 27.65 | ENDFNC** | 21 | 5056.9158 | 4990.6734 | SS |
| | | 27.29 | CORGAR | 22 | 5065.4281 | 4999.7801 | SS |
| | | 26.29 | CORSHED | 23 | 5067.0703 | 4983.0689 | SS |
| | | 25.78 | CORSHED | 24 | 5074.7940 | 4973.6899 | SS |
| | | 26.00 | LAWN | 25 | 5102.6329 | 4988.5583 | SS |
| | | 25.70 | LAWN | 26 | 5122.0144 | 4968.5952 | SS |
| | | 22.86 | CORHSE | 27 | 5129.9676 | 4921.3428 | SS |
| | | 23.36 | CORHSE | 28 | 5158.6146 | 4936.4600 | SS |
| | | 27.57 | CORBLDG | 29 | 4996.0968 | 4906.4287 | SS |
| | | 26.24 | CORBLDG | 30 | 5015.5183 | 4882.9661 | SS |
| | | 26.16 | CORHSEDK | 31 | 5051.8287 | 4875.3848 | SS |
| | | 24.32 | CORDECK | 32 | 5052.3761 | 4880.7168 | SS |
| | | 23.84 | COVER* | 33 | 5068.9372 | 4863.2593 | SS |
| | | 22.15 | CORDECK | 34 | 5081.5632 | 4846.3962 | SS |
| | | 22.97 | COVER | 35 | 5088.3244 | 4861.4403 | SS |
| | | 29.39 | BMNLM** | 36 | 5063.9145 | 4978.3841 | SS |
| | | 25.70 | FNCFNC* | 37 | 5075.4061 | 4971.0818 | SS |
| | | 29.51 | TSPIPE?* | 38 | 5068.6278 | 4963.0396 | SS |
| | | 29.59 | TS | 39 | 5058.0729 | 4974.7072 | SS |
| | | 30.03 | TS | 40 | 5044.0008 | 4964.2951 | SS |
| | | 29.45 | TS | 41 | 5061.2185 | 4939.5412 | SS |
| | | 29.10 | TS | 42 | 5077.5163 | 4947.7884 | SS |
| | | 27.94 | EDGLWN | 43 | 5081.6625 | 4947.0951 | SS |
| | | 28.87 | TSEDGLWN | 44 | 5072.7330 | 4940.8974 | SS |
| | | 28.51 | EDGLWN | 45 | 5061.6760 | 4935.1015 | SS |
| | | 29.43 | EDGLWN | 46 | 5051.5760 | 4948.7977 | SS |

JOB #14 563NELSON [100]

| Bearing | Distance | Elev | Descrip | Pnt. | Northing | Easting | Type |
|---|---|---|---|---|---|---|---|
| ----------01-12-2025-----11:51:56---------- | | | | | | D:...\BMHOME7 | |
| | | 29.62 | EDGLWN | 47 | 5038.6887 | 4966.0216 | SS |
| | | 29.78 | TPCRSTP* | 48 | 5032.2712 | 4968.1198 | SS |
| | | 28.26 | TPCRSTP* | 49 | 5038.1962 | 4951.1592 | SS |
| | | 27.16 | TPCRSTP* | 50 | 5049.9334 | 4935.3981 | SS |
| | | 25.88 | TPCRSTP* | 51 | 5062.6438 | 4918.3088 | SS |
| | | 28.33 | TOPIP*** | 52 | 5035.3407 | 4940.3178 | SS |
| | | 24.46 | BS@WLL | 53 | 5077.0760 | 4923.6536 | SS |
| | | 24.05 | BS@FNC | 54 | 5097.1730 | 4939.4442 | SS |
| | | 20.52 | ENDFNC | 55 | 5137.1228 | 4885.5757 | SS |
| | | 22.63 | CORHSE | 56 | 5116.0561 | 4899.0760 | SS |
| | | 23.09 | CORHSE | 57 | 5084.0958 | 4881.3982 | SS |
| | | 23.19 | @FNC | 58 | 5074.6914 | 4883.9869 | SS |
| | | 23.74 | CORHSE | 59 | 5089.1454 | 4885.1085 | SS |
| | | 23.92 | TPCRST* | 60 | 5091.2659 | 4906.8372 | SS |
| | | 23.47 | GND | 61 | 5103.7024 | 4914.7099 | SS |
| | | 23.90 | EDHWLK** | 62 | 5083.0436 | 4913.6638 | SS |

Point#, Start#-End# or G#= 4-

# APPROVAL FOR CONSTRUCTION

CA2009097056 N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES CA2009097056
SUBSURFACE SYSTEMS BUREAU
P.O. BOX 95, 29 HAZEN DRIVE, CONCORD, NH 03302-0095 APPROVAL NO.

THE PLANS AND SPECIFICATIONS FOR SEWAGE OR WASTE DISPOSAL SYSTEM SUBMITTED FOR:

OWNER: JOHN/NANCY NELSON
28 COLONY COVE RD
DURHAM NH 03824-

COPY SENT TO:
BUILDING INSPECTOR
13-15 NEWMARKET RD
DURHAM NH 03824

BY APPLICANT: PERMIT NO. 00348
STOCKTON SERVICES
PO BOX 1306
HAMPTON NH 03843-1306

~~12-24-2~~ /
Map No./Lot No.: PRE67
Subd. Appvl. No.:
Subd. Name: STRAFFORD
County: 1119
Registry Book No.: 630
Registry Page No.:
Probate Docket No.: (If Applicable)
N
Type of System: 3 BR
450 GPD
Town/City Location: DURHAM
Street Location: 28 COLONY COVE ROAD

Subsurface waste disposal systems must be operated and maintained in a manner so as to prevent nuisance or health hazard due to system failure. (RSA 485-A:37)

It is unlawful to discharge any hazardous chemicals or substances into subsurface waste disposal systems. Included are paints, thinners, gasoline and chlorinated hydrocarbon solvents such as TCE, sometimes used to clean failed septic systems and auto parts. (Env-Ws 1503.04)

**ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES IN PLANS AS INDICATED BELOW CONDITIONS**

1. THIS APPROVAL IS VALID FOR 90 DAYS FROM DATE OF SAID APPROVAL, PER ENV-WQ 1003.22.
2. THIS APPROVAL IS GRANTED ONLY TO IMPROVE AN EXISTING SITUATION.
3. ALL ACTIVITIES SHALL BE IN ACCORDANCE WITH THE COMPREHENSIVE SHORELAND PROTECTION ACT, RSA 483-B. THE OWNER IS RESPONSIBLE FOR OBTAINING ANY SHORELAND PERMIT THAT MAY BE REQUIRED PER RSA 483-B, FOR CONSTRUCTION, EXCAVATION OR FILL THAT WILL OCCUR WITHIN THE PROTECTED SHORELAND AFTER JULY 1, 2008.
4. THIS PERMIT IS FOR THE RECONSTRUCTION OF THE SEPTIC SYSTEM ONLY, ANY REPAIR OR REPLACEMENT OF THE STRUCTURE SHALL NOT INCREASE THE EXISTING FOOTPRINT OR OUTSIDE DIMENSIONS.
5. WAIVERS GRANTED.

Eric Thomas
05/20/2009 ERIC J THOMAS

Approved this date: _____ By: _____
N.H. Department of Environmental Services Staff
Date amended: _____ Amended by: _____ (OVER)

REVISED 8/01
200901177 APPLICANT'S

# PT PERC TEST DATA CA2009097056

PERCOLATION RATE FROM PREVIOUS APPROVAL – 8 MIN/IN
(NOT A DETERMINATIVE FACTOR FOR CLEAN SOLUTION SYSTEM)

DESIGN LOADING: EXISTING 3 BEDROOM HOUSE

AREA REQUIRED: PER CLEAN SOLUTION SPECIFICATIONS: MINIMUM 100 SF DISPERSAL AREA REQUIRED

AREA PROPOSED: 10' X 25 = 250 SF PROVIDED

ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES IN PLANS AS INDICATED ON THIS CONDITIONAL APPROVAL.

REVIEWED AND APPROVED
IN ACCORDANCE WITH THE
REQUIREMENTS OF THE
NH DEPT OF ENVIRONMENTAL SERVICES
WATER DIVISION.
Signed Eric Thomas
Date 5-20-09

PROPOSED REPLACEMENT
# SEPTIC SYSTEM PLAN
EXISTING FAILED SYSTEM

RECEIVED MAY 14 2009 Subsurface

LOCUS: 28 COLONY COVE ROAD
TAX MAP 12-24-2
DURHAM, NH

OWNER: JOHN AND NANCY NELSON
28 COLONY COVE ROAD
DURHAM, NH 03824

OCCUR,

NEW HAMPSHIRE
Designer
of
Subsurface Disposal
Systems
* * *
Ann W. Bialobrzeski
No. 348
Water Supply & Pollution Control

APPLICANT:
STOCKTON SERVICES
PO BOX 1306
HAMPTON, NH 03842
603 929-7404

DATE: MAY 6, 2009

APPROVAL: _____

563

The State of New Hampshire

# DEPARTMENT OF ENVIRONMENTAL SERVICES

**Thomas S. Burack, Commissioner**

September 02, 2009

John Nelson
Colony Cove Rd
Durham, NH 03824

**RE: File #2009-00880 John Nelson - Colony Cove Rd.- Durham Tax Map/Lot # 12 / 24-2**

Dear Mr. Nelson:

Based upon review of the above referenced application, in accordance with RSA 482-A, the Department of Environmental Services ("DES") Wetlands Bureau is hereby approving your after-the-fact request to retain temporary impact to 200 sq. ft. of developed upland tidal buffer zone, following Emergency Authorization issued 5/14/2009, to install a replacement septic tank associated with the replacement of a failed septic system adjacent to Great Bay.

This approval is subject to the following project specific conditions:

1. All work shall have been in accordance with plans by Stockton Services dated 5/6/2009, as received by DES on 5/15/2009.
2. Any further alteration of areas on this property that are within the jurisdiction of the DES Wetlands Bureau will require a new application and further permitting by the Bureau.

It is also subject to the following general conditions:

1. This after-the-fact approval does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
2. This after-the-fact approval does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required.

The decision to approve this after-the-fact request was based on the following findings:

1. This is a minor impact project per Administrative Rule Env-Wt 303.03(b), projects in previously developed uplands areas within 100 feet of the highest observable tide line that are not major or minor.
2. The need for the proposed impacts has been demonstrated by the applicant per Env-Wt 302.01. The project was necessary to replace a failed septic system.
3. The applicant has provided evidence which demonstrates that this proposal is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per Env-Wt 302.03.
4. The applicant has demonstrated by plan and example that each factor listed in Env-Wt 302.04(a) Requirements for Application Evaluation, has been considered in the design of the project.
5. The Durham Conservation Commission did not report.

Any party may apply for reconsideration with respect to any matter determined in this action within 30 days from the date of this approval letter. A motion for reconsideration must specify all grounds upon which future appeals may be based, and should include information not available to DES when the decision was made. DES may grant reconsideration if, in its opinion, good reason is provided in the motion.

If you have any questions regarding the intent of this approval do not hesitate to contact me at the Pease District office at (603) 559-1507.

Sincerely,

Dori Wiggin
East Region Supervisor
DES Wetlands Bureau

cc: Durham Conservation Commission
Durham Municipal Clerk
Stockton Services

The State of New Hampshire

**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**Thomas S. Burack, Commissioner**

# EMERGENCY AUTHORIZATION VERIFICATION

**File Number:** 2009-00880
**Owner:** John Nelson
**Site Location:** 28 Colony Cove Road
**Town:** Durham
**Agent/Contractor:** MCO Excavating

**NOTE -- CONDITIONS**

**Waterbody:** Great Bay
**Tax map/Lot number:** 12 / 24-2

This is to confirm that I have given emergency authorization in accordance with Wt 500 to the owner/agent to conduct the following work in DES Wetlands Bureau jurisdiction (under RSA 482-A):

**Description:** Temporarily impact 200 sq. ft. of developed upland tidal buffer zone to install a replacement septic tank associated with the replacement of a failed septic system adjacent to Great Bay.

This authorization is subject to the following conditions:

1. All work shall be conducted according to plans by Stockton Services dated 5/6/2009, received by the DES Wetlands Bureau on 5/15/2009, and as subsequently approved by the DES Subsurface Bureau.
2. The owner shall notify the municipal Conservation Commission and Building Inspector prior to the start of work.
3. This form shall be posted at the work site in a location that is visible to the public (to the extent possible).
4. Appropriate siltation and erosion controls shall be utilized.
5. A completed follow-up application shall be submitted for after-the-fact permitting of the project shall be submitted to the DES Wetlands Bureau by July 15, 2009.

THIS AUTHORIZATION EXPIRES July 1, 2009. All work must be completed by this date.

**This authorization has been given file number 2009-880. Please reference that number in your after the fact application.**

This form is valid only if signed below by the DES Wetlands Bureau Administrator or his designee.

**Signed:** _____ **Date:** **May 15, 2009**
Dori Wiggin, East Region Supervisor

cc Durham Conservation Commission
Eric Thomas, DES Subsurface Bureau
Stockton Services
MCO Excavating

Powered by Vision Appraisal Technology

**Map-block-lot :** 12/ 24/ 2/ / /

**Location:** 28 COLONY COVE ROAD

**Owner Name:** NELSON, JOHN

**Account Number:** 1218

## Parcel Value

| Item | Current Assessed Value | FY 2008 Assessed Value |
|---|---|---|
| Buildings | 131,400 | 131,400 |
| Xtra Bldg Features | 600 | 600 |
| Outbuildings | 14,700 | 14,700 |
| Land | 221,800 | 221,800 |
| **Total:** | **368,500** | **368,500** |

## Owner of Record

NELSON, JOHN
NELSON, NANCY
28 COLONY COVE ROAD
DURHAM, NH 03824

## Ownership History

| Owner Name | Book/Page | Sale Date | Sale Price |
|---|---|---|---|
| NELSON, JOHN | | | 0 |

## Land Use

| Land Use Code | Land Use Description |
|---|---|
| 1013 | SFR WATER MDL-01 |

## Land Line Valuation

| Size | Zone | Assessed Value |
|---|---|---|
| 0.11 AC | RC | 221,800 |

## Construction Detail

**Building # 1**

## Building Valuation

**Living Area**: 1,332 square feet **Replacement Cost**: 172,952 **Year Built**: 1928
**Depreciation**: 24% **Building Value**: 131,400

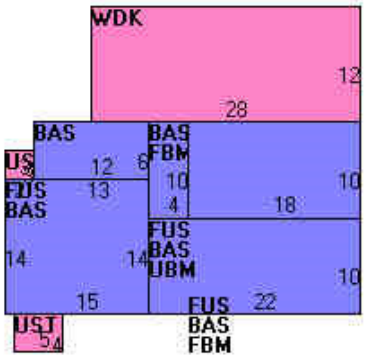
## Extra Features

| Code | Description | Units |
|---|---|---|
| FLU1 | FLUE-CONCRETE | 1 UNITS |

## Outbuildings

| Code | Description | Units |
|---|---|---|
| DCK1 | DOCKS-RES TYPE | 600 S.F. |

## Building Sketch




## Subarea Summary

| Code | Description | Gross Area | Living Area |
|---|---|---|---|
| BAS | First Floor | 722 | 722 |
| FBM | Basement, Finished | 220 | 0 |
| FUS | Upper Story, Finished | 610 | 610 |
| UBM | Basement, Unfinished | 220 | 0 |
| UST | Utility, Storage, Unfinished | 29 | 0 |
| WDK | Deck, Wood | 336 | 0 |

# Know All Men By These Presents

THAT It, CHASE ENTERPRIZES, INC. of Durham Point Road, Durham, Strafford County, New Hampshire 03824

for consideration paid, grant to JOHN NELSON and NANCY E. NELSON, husband and wife, both of Colony Cove Road, Durham, Strafford County, New Hampshire 03824

as joint tenants with rights of survivorship, and not as tenants in common, with warranty covenants

STRAFFORD COUNTY REGISTRY OF DEEDS 1983 Dec 27 AM 8:47

012849

A certain tract or parcel of land, with the buildings thereon, situated at Durham Point in Durham, Strafford County, New Hampshire on Colony Cove Road, so-called, bounded and described as follows:

Beginning at a stake at the Southeasterly corner of the premises hereby conveyed and at the Northeasterly corner of land of Elms (formerly Grant); thence running Northwesterly by said Elms land 22.5 feet, more or less, to an iron pipe in a fence; thence continuing on the same course (N54°51'W) in part by a fence line along land of said Elms 194.8 feet, more or less, to an iron pin to be placed in the ground at said road; thence Northeasterly by said road 52.5 feet, more or less, to an iron pin placed in the ground at the corner of other land of the grantors known as the "Cottage Property"; thence Southeasterly by land of Chase to and through an iron pipe and along an existing picket fence line 181 feet, more or less, to the end of the fence; thence continuing on the same course 18 feet, more or less, to a stake in the ground; thence turning and running Southwesterly along the shore of Little Bay, so-called, (also known as Great Bay) a distance of 52.5 feet, more or less, to the point of beginning.

The grantees shall have the right to use the well and sewage disposal system situate on the "Cottage Property" in common with the owners thereof until such time as the grantor, at its expense, constructs a well and sewage disposal system on the within described property, to be completed on or before June 1, 1984.

Meaning and intending to convey the same premises described in deed of Robert F. Barlow to the within grantor dated September 30, 1980, recorded Strafford County Records, Book 1055, Page 439.

STATE OF NEW HAMPSHIRE TAX ON TRANSFER OF REAL PROPERTY STATE TAX COMMISSION 910.00

BK-1119 PGE-630

IN WITNESS WHEREOF, by its proper official, has hereunto set its hand this 23rd day of December, 1983

WITNESS:

CHASE ENTERPRIZES, INC.

By: Malcolm J. Chase Treas
Malcolm J. Chase, Treasurer

Jere A. Chase Pres.
Jere A. Chase, President

STATE OF NEW HAMPSHIRE

COUNTY OF STRAFFORD

The foregoing instrument was acknowledged before me this 23rd day of December, 1983 by Malcolm J. Chase, Treasurer and Jere A. Chase, President of CHASE ENTERPRIZES, INC., a N.H. corporation, on behalf of the corporation.

JUSTICE OF THE PEACE
NOTARY PUBLIC
Commission expires 11/2/88

COOPER, HALL, WHITTUM & SHILLABER, ATTORNEYS

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
Subsurface Systems Bureau
6 Hazen Drive, PO Box 95, Concord, NH 03302-0095
603-271-3501 FAX 603-271-6683

# Site Assessment Form
RSA 485-A:39

RECEIVED
OCT 13 2004
PLANNING, ZONING & CODE ENF.
TOWN OF DURHAM, NH

A. **Property**

1. Seller's Name: **DON THOMPSON** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**
2. Agent's Name: **DON L. THOMPSON REAL ESTATE** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**
3. Assessor's Name: **BRUCE L. POHOPEK** Designer Permit #: **253**
   Street: **42 FLAGG ROAD** City/Town: **ROCHESTER**
   State: **NH** Zip: **03839** Tel #: **603-330-3262**
4. Lot Location:
   City/Town: **DURHAM** Lot #: **23-1** Tax Map #: **12**
   Street: **30 COLONY COVE RD.** Subdivision Name: **N/A PRE 67 LOT**
5. Brief Description of Property and Structures (incl. # bedrooms): **THE LOT IS A 3 BEDROOM RESIDENCE LOCATED ON THE GREAT BAY. THE ORIGINAL SEPTIC APPROVAL # 10720 DATED 6/26/70.**
6. Abutters, if known (attach additional sheet if necessary):
   Name: ----- Mail Address: ----
   Name: ----- Mail Address: ----
   Name: ----- Mail Address: ----

B. **Lot Characteristics**

1. Lot Size: **0.50 ACRES ( BY SCALE )**
2. Slope: **A/B SLOPE ( SCS SOILS MAPS )**
3. Loading Capacity (calculated): **480 GPD**
4. Water Supply: Well on Lot: **X** Municipal _____ (name)
   Community:_____ (name) Other:
5. Soil Type*: **SCS HCB SOIL GROUP 4, 1.45 FACTOR**
6. Estimated Seasonal High Water Table*: **3' SCS SOIL DATA**
7. Scope of Review (e.g., written record only, on-site investigation, etc.): **REVIEW OF OWNERS INFORMATION, WRITTEN RECORDS, MUNICIPAL RECORDS AND ON SITE FIELD INVESTIGATION.**
8. Designer=s Assessment of Site for Current Use of System: **THE CURRENT LEACH FIELD IS LOCATED 100'+ FROM THE HWL OF THE GREAT BAY AND APPEARS TO BE FUNCTIONING PROPERLY.**

*From US Natural Resources Conservation Service maps or actual data, if available
Distribution: Original with listing, then to Buyer; 1 copy to Assessor

**Present Sewage Disposal System**

1. Does the property currently have any sewage disposal system? Yes ☒ No ☐

2. If yes, is the system state approved? Yes ☒ No ☐

If YES, a copy of the approved plan, construction approval and operational approval must be attached to the original of this form. Also, an 8-1/2" x 11" sketch to scale or with dimensions shown of the lot, approximate property lines and approximate locations of abuttors' septic systems and wells (with 75' well radius), if known, must be attached.

If NO, supply all available information on the type, capacity, age and location of the system, and include an 8-1/2" x 11" sketch to scale or with dimensions shown of the property and the location of the system. Also, an 8-1/2" x 11" sketch to scale or with dimensions shown of the lot, approximate property lines and approximate locations of abuttors' septic systems and wells (with 75' well radius), or if known, must be attached.

NOTE: Env-Ws 1022.03 PROVIDES THAT "HOLDING TANKS SHALL NOT BE APPROVED EXCEPT AS A REPLACEMENT FOR AN EXISTING SYSTEM IN FAILURE WHEN NO OTHER MEANS OF DISPOSAL IS PRACTICAL." HOLDING TANKS ARE NOT APPROVED FOR NEW CONSTRUCTION OR FOR EXPANSION OF EXISTING STRUCTURES.

THE ASSESSOR MUST STAMP AND DATE BELOW

NEW HAMPSHIRE
Designer
of
Subsurface Disposal
Systems
* * *
Bruce L. Pohopek
No. 253
Water Supply & Pollution Control

Assessment Date: Oct 5, 2004

Bruce L. Pohopek

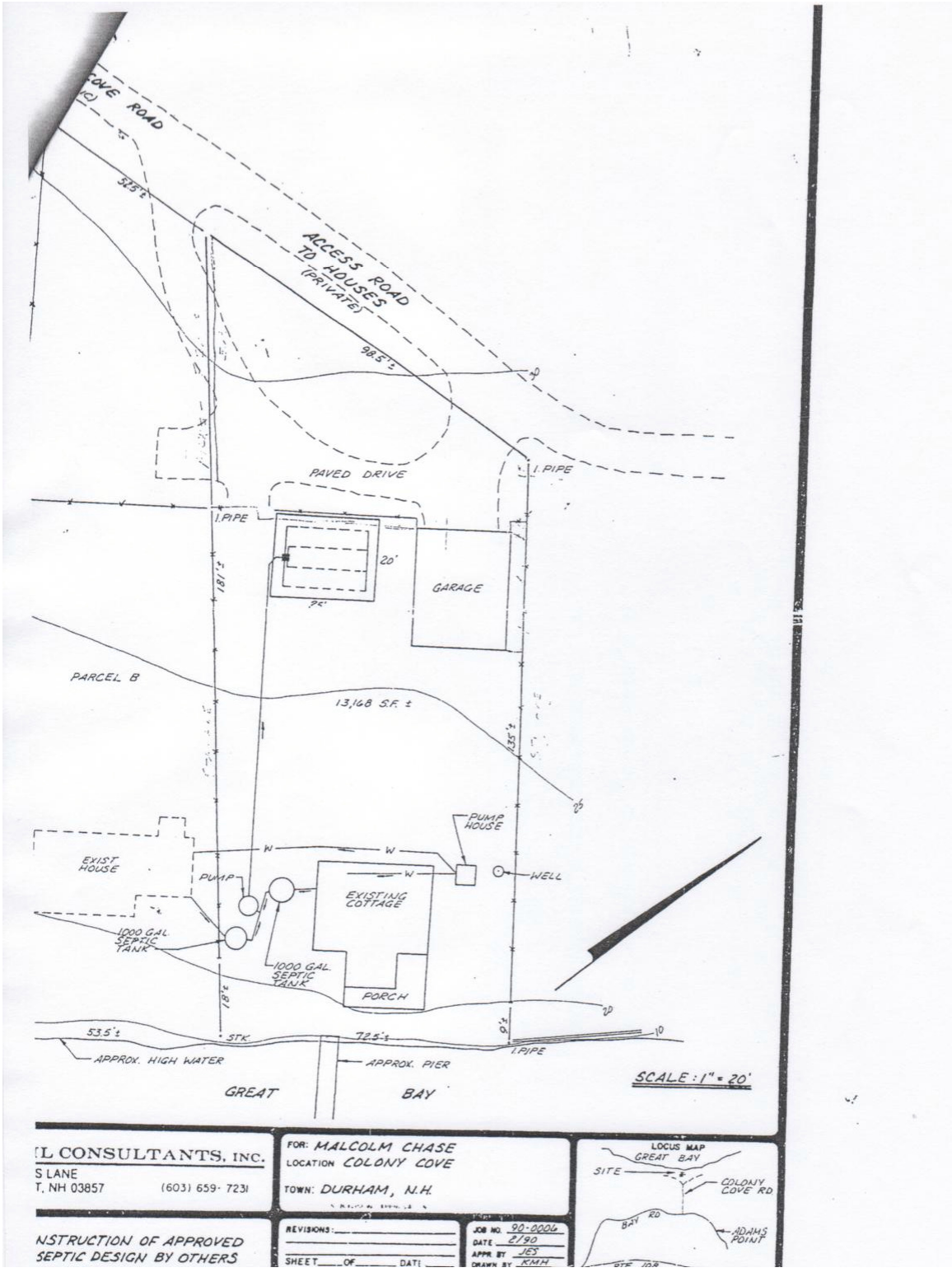
THE STATEMENT BELOW MUST BE SIGNED AND DATED BY THE BUYER

The undersigned certify that we have reviewed this Site Assessment Form and understand the information contained herein and that we have received a copy of this Site Assessment Form.

Buyer: _____ Date: _____

Buyer: _____ Date: _____

Revised 10/99


COVE ROAD
53.5'±
ACCESS ROAD TO HOUSES (PRIVATE)
98.5'±
PAVED DRIVE
I. PIPE
I. PIPE
20'
GARAGE
PARCEL B
13,168 S.F. ±
PUMP HOUSE
EXIST. HOUSE
W
W
W
PUMP
WELL
EXISTING COTTAGE
1000 GAL. SEPTIC TANK
1000 GAL. SEPTIC TANK
PORCH
53.5'±
STK.
72.5'±
I. PIPE
APPROX. HIGH WATER
APPROX. PIER
GREAT
BAY
SCALE: 1" = 20'
L CONSULTANTS, INC.
S LANE
T, NH 03857
(603) 659-7231
FOR: MALCOLM CHASE
LOCATION COLONY COVE
TOWN: DURHAM, N.H.
LOCUS MAP
GREAT BAY
SITE
COLONY COVE RD
BAY RD
ADAMS POINT
NSTRUCTION OF APPROVED
SEPTIC DESIGN BY OTHERS
REVISIONS:
SHEET OF DATE
JOB NO. 90-0006
DATE 2/90
APPR. BY JES
DRAWN BY KMH

Stockton Services
PO Box 1306
Hampton, NH 03843-1306
603 929-7404

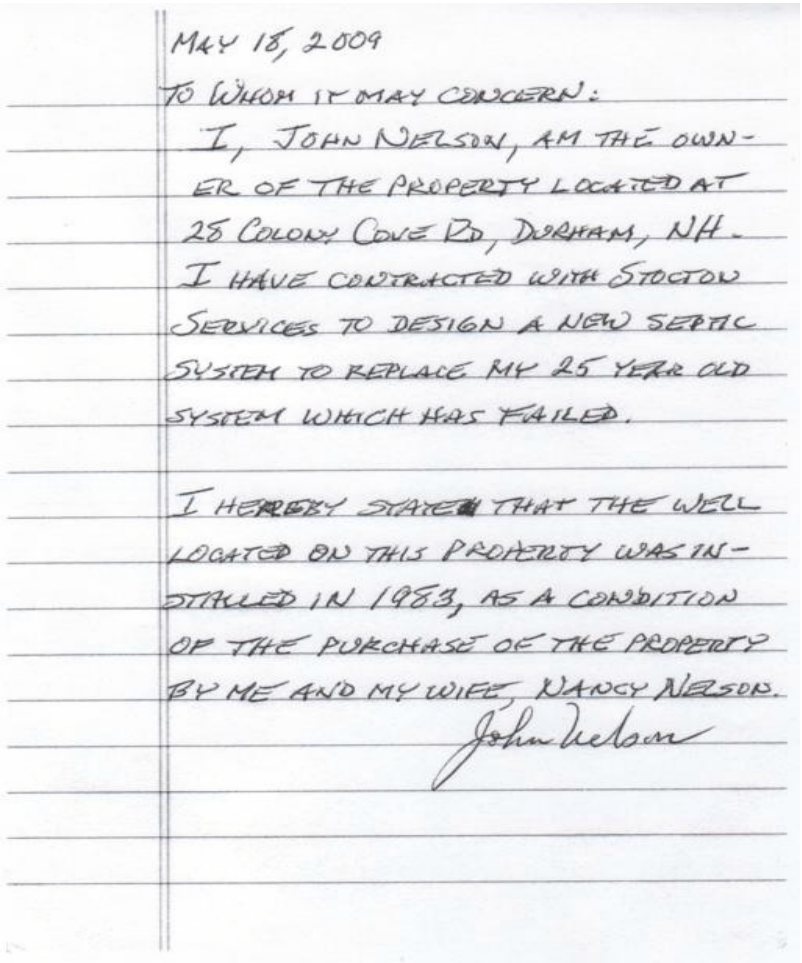
Eric Thomas
NHDES-Subsurface Bureau
PO Box 95
Concord, NH 03302-0095

May 18, 2009
Re: Replacement system for John and Nancy Nelson, 28Colony Cove Road, Durham

Dear Eric:

In response to your phone call (thank you) and letter regarding items needed for approval to replace the failed system in question:

1. You did not mention it in your letter but you verbally asked me for a statement from the owner as to date his well was installed. A scan of the original is provided below:



MAY 18, 2009

TO WHOM IT MAY CONCERN:

I, JOHN NELSON, AM THE OWNER OF THE PROPERTY LOCATED AT 28 COLONY COVE RD, DURHAM, NH. I HAVE CONTRACTED WITH STOCTON SERVICES TO DESIGN A NEW SEPTIC SYSTEM TO REPLACE MY 25 YEAR OLD SYSTEM WHICH HAS FAILED.

I HEREBY STATE THAT THE WELL LOCATED ON THIS PROPERTY WAS INSTALLED IN 1983, AS A CONDITION OF THE PURCHASE OF THE PROPERTY BY ME AND MY WIFE, NANCY NELSON.

John Nelson

2. Regarding the encroachment waiver issue, please find below scanned copies of a portion of a Site Assessment document that was prepared by Bruce Pohopek in 2004 for the abutting property. It provides you with the confirmation you requested that the abutting well was installed AFTER 1989, since there was no well found in the front of the abutting lot when the property was inspected in 2004. The existing system shown on my design was approved in 1981 (#92352), has been in place for more than 25 years, and is being replaced within the same footprint as the original chamber field. I searched for and found no record of a well release form executed by any present or former owner of 30 Colony Cove Road. I must therefore assume that the abutter has no rights over that portion of the 75' radius around his new well that falls on my clients property (28 Colony Cove Road).

NHDES

**State of New Hampshire**
**DEPARTMENT OF ENVIRONMENTAL SERVICES**
Subsurface Systems Bureau
6 Hazen Drive, PO Box 95, Concord, NH 03302-0095
603-271-3501 FAX 603-271-6683

**Site Assessment Form**
RSA 485-A:39

RECEIVED
OCT 13 2004
PLANNING, ZONING & CODE ENF.
TOWN OF DURHAM, NH

A. **Property**

1. Seller's Name: **DON THOMPSON** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**
2. Agent's Name: **DON L. THOMPSON REAL ESTATE** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**
3. Assessor's Name: **BRUCE L. POHOPEK** Designer Permit #: **253**
   Street: **42 FLAGG ROAD** City/Town: **ROCHESTER**
   State: **NH** Zip: **03839** Tel #: **603-330-3262**
4. Lot Location:
   City/Town: **DURHAM** Lot #: **23-1** Tax Map #: **12**
   Street: **30 COLONY COVE RD.** Subdivision Name: **N/A PRE 67 LOT**
5. Brief Description of Property and Structures (incl. # bedrooms): **THE LOT IS A 3 BEDROOM RESIDENCE LOCATED ON THE GREAT BAY. THE ORIGINAL SEPTIC APPROVAL # 10720 DATED 6/26/70.**
6. Abutters, if known (attach additional sheet if necessary):
   Name: ----- Mail Address: ----
   Name: ----- Mail Address: ----
   Name: ----- Mail Address: ----

B. **Lot Characteristics**

1. Lot Size: **0.50 ACRES ( BY SCALE )**
2. Slope: **A/B SLOPE ( SCS SOILS MAPS )**
3. Loading Capacity (calculated): **480 GPD**
4. Water Supply: Well on Lot: **X** Municipal _____ (name)
   Community:_____ (name) Other:
5. Soil Type*: **SCS HCB SOIL GROUP 4, 1.45 FACTOR**
6. Estimated Seasonal High Water Table*: **3' SCS SOIL DATA**
7. Scope of Review (e.g., written record only, on-site investigation, etc.): **REVIEW OF OWNERS INFORMATION, WRITTEN RECORDS, MUNICIPAL RECORDS AND ON SITE FIELD INVESTIGATION.**
8. Designer=s Assessment of Site for Current Use of System: **THE CURRENT LEACH FIELD IS LOCATED 100'+ FROM THE HWL OF THE GREAT BAY AND APPEARS TO BE FUNCTIONING PROPERLY.**

*From US Natural Resources Conservation Service maps or actual data, if available
Distribution: Original with listing, then to Buyer; 1 copy to Assessor

**Present Sewage Disposal System**

1. Does the property currently have any sewage disposal system? Yes ☒ No ☐

2. If yes, is the system state approved? Yes ☒ No ☐

If YES, a copy of the approved plan, construction approval and operational approval must be attached to the original of this form. Also, an 8-1/2" x 11" sketch to scale or with dimensions shown of the lot, approximate property lines and approximate locations of abuttors' septic systems and wells (with 75' well radius), if known, must be attached.

If NO, supply all available information on the type, capacity, age and location of the system, and include an 8-1/2" x 11" sketch to scale or with dimensions shown of the property and the location of the system. Also, an 8-1/2" x 11" sketch to scale or with dimensions shown of the lot, approximate property lines and approximate locations of abuttors' septic systems and wells (with 75' well radius), or if known, must be attached.

NOTE: Env-Ws 1022.03 PROVIDES THAT "HOLDING TANKS SHALL NOT BE APPROVED EXCEPT AS A REPLACEMENT FOR AN EXISTING SYSTEM IN FAILURE WHEN NO OTHER MEANS OF DISPOSAL IS PRACTICAL." HOLDING TANKS ARE NOT APPROVED FOR NEW CONSTRUCTION OR FOR EXPANSION OF EXISTING STRUCTURES.

THE ASSESSOR MUST STAMP AND DATE BELOW

NEW HAMPSHIRE
Designer
of
Subsurface Disposal
Systems
* * *
Bruce L. Pohopek
No. 253
Water Supply & Pollution Control

Assessment Date: Oct 5, 2004
Bruce L. Pohopek

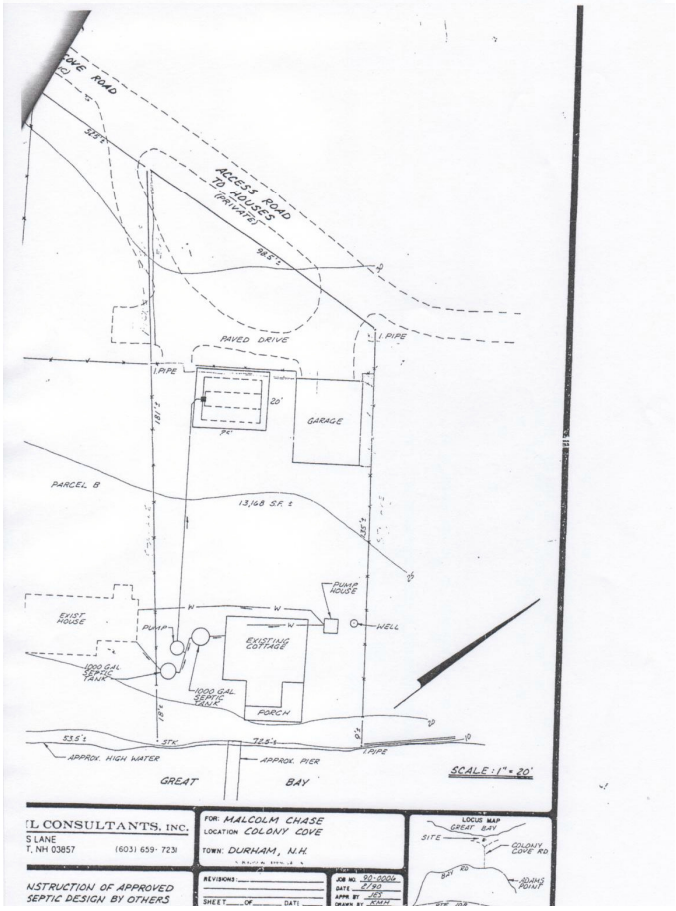
THE STATEMENT BELOW MUST BE SIGNED AND DATED BY THE BUYER

The undersigned certify that we have reviewed this Site Assessment Form and understand the information contained herein and that we have received a copy of this Site Assessment Form.

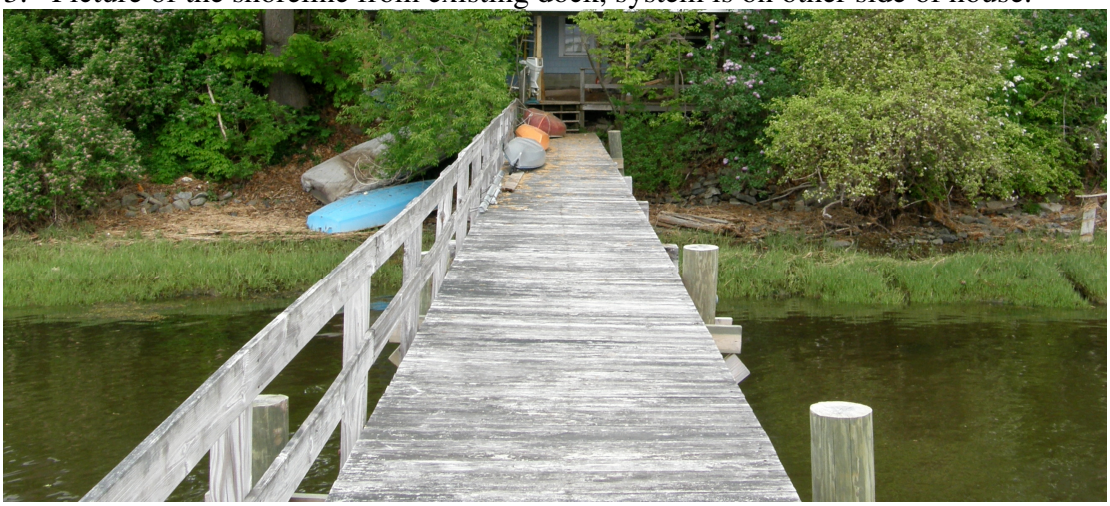
Buyer: _____ Date: _____

Buyer: _____ Date: _____

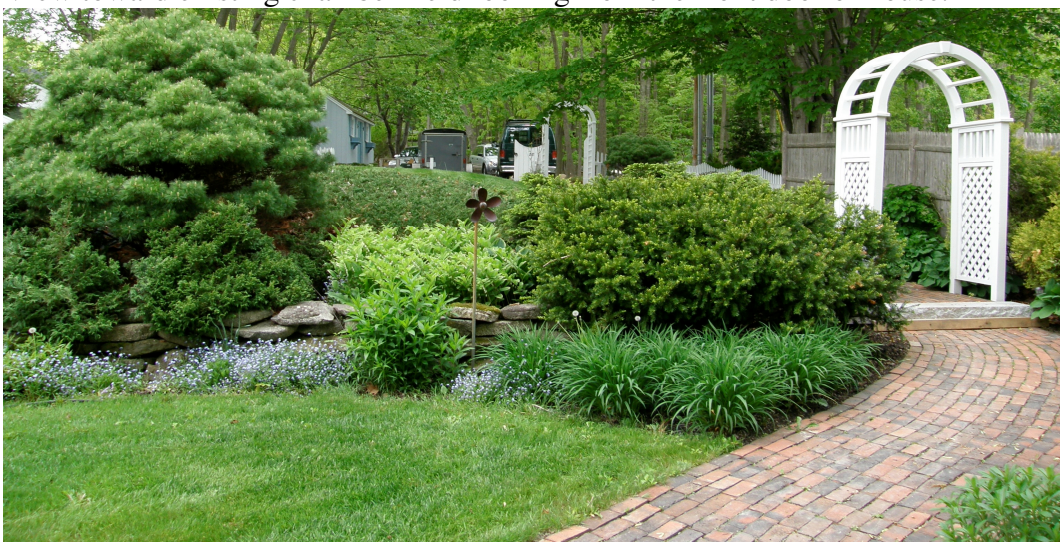
Revised 10/99



3. Picture of the shoreline from existing dock, system is on other side of house.



View toward existing chamber field looking from the front door of house.



View of area where septic tank will be replaced.

4. I have received the Emergency Authorization Verification from Dori and have noted that you were sent a copy as well. I am sure that you will include mention of the authorization and file number 2009-880 in your conditions of approval.

In the interest of expediting the installation, with this letter added to your file I don't see the need to make changes to the plans and hope you will agree. If not, can you please confirm at least that this added information will allow you to issue approval. Client needs to give Wastewater Alternatives 3 weeks notice to coordinate with installer, etc.

Yours truly,

*Tocky*

Anne W. Bialobrzeski
NH Designer Permit #348
Stockton Services
603 929-7404

**To**: Anne Bialobrzeski, Stockton Services
PO Box 1306

Hampton, NH 03843-1306

**From**: NH Natural Heritage Bureau

**Date**: 7/9/2009 (valid for one year from this date)

**Re**: Review by NH Natural Heritage Bureau of request submitted 6/27/2009

**NHB File ID:** NHB09-1241 **Applicant:** owner

**Location:** Durham
Tax Maps: Map 12 Lot 24-2

**Project Categories:** Water/Wastewater: Septic system

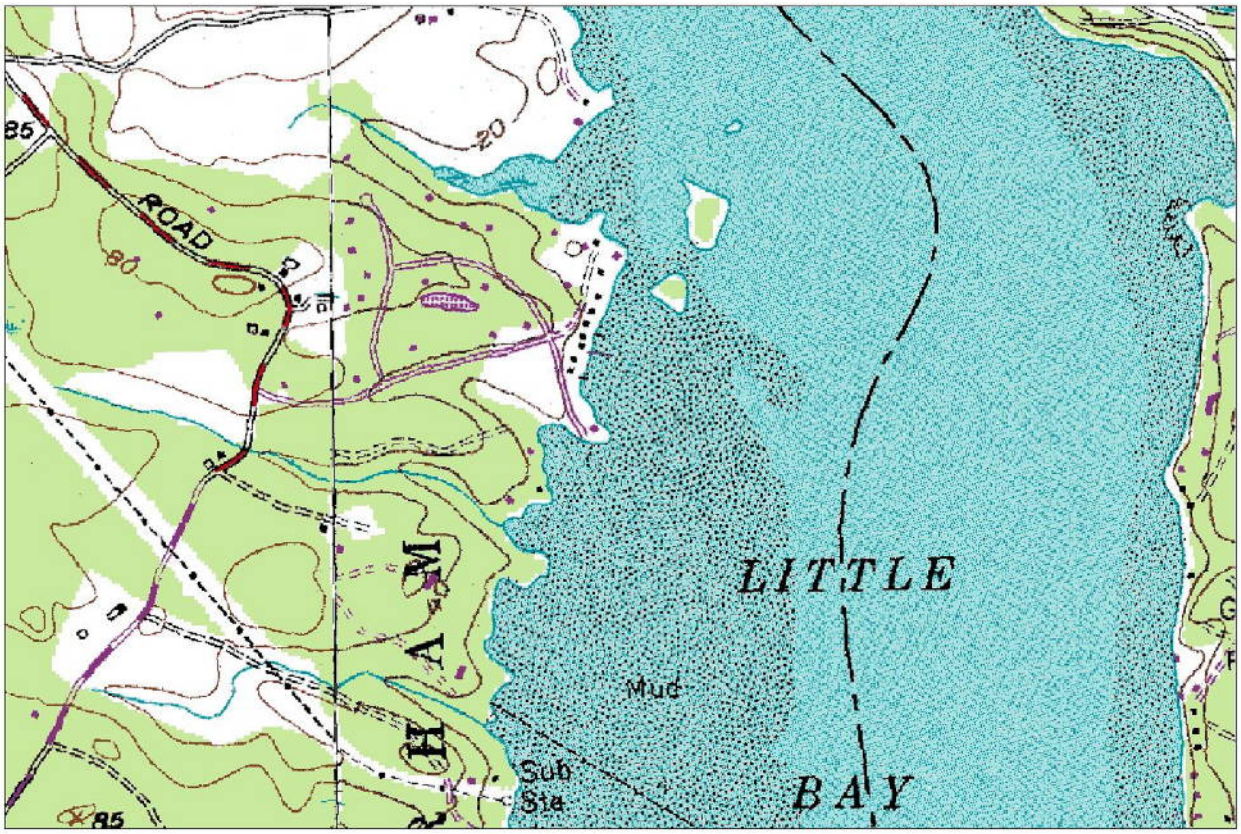
Your project was reviewed by staff of the NH Natural Heritage Bureau and/or the Nongame and Endangered Species Program and it was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

# MAP OF PROJECT BOUNDARIES FOR: **NHB09-1241**

NHB09-1241

NH Natural Heritage Bureau




0.25 0 0.25 0.5 0.75 1 Miles

1:10211

Valid for one year from this date: 09 Jul 2009

Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

**WASTEWATER ALTERNATIVES, INC**
*developing innovative solutions with sustainable results*
2 Whitney Road – Suite 10 - Concord, NH 03301

Telephone: 603-783-8042 Toll Free: (866) 900-2415 Fax (603) 783-4499
www.thecleansolution.com email: info@thecleansolution.com

May 6, 2009

John & Nancy Nelson
28 Colony Cove Road
Durham, NH 03824

Dear John & Nancy Nelson:

Thank you for choosing to use ***THE CLEAN SOLUTION™*** alternative septic system for your existing 3-bedroom single-family home located at 28 Colony Cove Road in Durham, NH, overlooking Little Bay. Attached is a sales agreement for the system. This agreement describes what you are buying, the required maintenance, your warranty, the price and the terms of sale.

The following is enclosed:

1. A complete copy of the Sales Agreement and Inspection Contract for your records.

2. **Inspection Contract** - Return one signed copy to Anne (Tocky) Bialobrzeski of Stockton Service. Tocky will send one signed copy to NHDES with your subsurface disposal plan submittal. NHDES needs this for their records to show that you are aware of the required maintenance.

3. **Sales Agreement and Inspection Contract –** Please sign and return with the initial payment to WAI approximately three weeks prior to the system installation. Please provide WAI with the name and contact information of your installer. This information is needed to allow WAI to coordinate the installation date.

I look forward to working with you. Please give me a call if you would like to discuss the system or the sales agreement.

Sincerely,

Gary R. Spaulding
General Manager

# WASTEWATER ALTERNATIVES, INC

2 Whitney Road – Suite 10 - Concord, NH 03301

Telephone: 603-783-8042 Toll Free: (866) 900-2415 Fax (603) 783-4499
www.thecleansolution.com email: gary@thecleansolution.com


## RESIDENTIAL
## SALES AGREEMENT
## May 6, 2009

| **BUYER:** | |
|---|---|
| Name: | John & Nancy Nelson |
| Address: | 28 Colony Cove Road |
| City, State Zip: | Durham, NH 03824 |
| Phone: | |
| Cell: | |
| Email: | |

| **OWNER-IF DIFFERENT:** | |
|---|---|
| Name: | |
| Address: | |
| City, State Zip: | |
| Phone: | |
| Cell: | |
| Email: | |

| **SITE:** | |
|---|---|
| Property ID: | Tax Map Lot No. |
| Address: | 28 Colony Cove Road |
| City, State, Zip: | Durham, NH 03824 |
| Waterbody: | Little Bay Atlantic Ocean |

| **Property Type:** | |
|---|---|
| Residential Single Family: | Yes |
| Residential Seasonal: | No |

Wastewater Alternatives, Inc. (WAI) agrees to supply a Model ***250ST-R3-P4 CLEAN SOLUTION™*** Sewage Treatment System to the buyer installed at the above site in accordance with the attached specifications and the subsurface disposal plan submitted for a ***3-bedroom single family home*** by ***Stockton Services*** as approved by NHDES. ***THE CLEAN SOLUTION*** system has been designed based on design parameters provided by the designer / owner. Change of use that results in the increase in daily flow or wastewater strength will require approval by WAI. Approval from NHDES and Local Land Use Boards may also be required.

SHOULD THE ABOVE PROPERTY BE SOLD, THE ABOVE OWNER SHALL PROVIDE THE NEW OWNER WITH A COPY OF THIS AGREEMENT. THE TERMS AND CONDITIONS OF THIS AGREEMENT WILL TRANSFER TO THE NEW BUYER AND BECOME BINDING ON THE NEW OWNER(S).

**This Sales Agreement is subject to the following conditions:**

1. The buyer has retained a licensed designer and has obtained all necessary approvals from NHDES and Local Land Use Boards.
2. The buyer will provide WAI with copies of the plans approved by NHDES.
3. The buyer has or will have retained a qualified installer licensed by the State to install Subsurface Disposal Systems prior to system installation.
4. This agreement contains a required maintenance schedule. Failure to perform the required maintenance could result in premature failure of the dispersal field and void the warranty of system and system components.

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www.thecleansolution.com email: gary@thecleansolution.com


## SYSTEM COMPONENTS PROVIDED BY WAI:

**WAI will provide the following system components as shown on the attached design schematic and specifications. These components shall be installed as shown on the design plans by a qualified installer licensed by the State of NH to install Subsurface Disposal Systems.**

1. A 2100-gallon – 3-compartment (1250/350/500) standard duty tank with tank manufacturer applied Conseal 4" Conwrap and Karnak 100 AF waterproofing. to function as a septic tank, an aerobic treatment tank, settling tank and a pump chamber.
2. Plastic access covers and plastic risers to a maximum height of 24". If depth of cover over the top of the tank exceeds 24", the site contractor shall provide additional risers as necessary. Contractor shall ensure that all risers are watertight and that all screws and gaskets are in place and that the cover(s) have been secured. If concrete risers, covers or cast iron covers are used, contractor shall use water plug or an equivalent method to ensure water tightness.

**WAI will provide the following system components and labor to install components as shown in the attached design schematic and specifications:**

1. Plastic Media in BioCon™ Chamber
2. 1 – SL44 Compressor- Owner and WAI will mutually determine placement of the compressor. Compressor needs to be within 50' of the BioCon tank.
3. Oxygen transfer system.
4. Baffles within BioCon™ Chamber and settling tank.
5. Air compressor shelf.
6. Sump Pump: 0.4-hp pump with necessary pump controls and high-water alarm. Location of the pump controls, electrical disconnect switch and high-water alarm must be within 50 feet of, and visible from the pump chamber.

**Electrical Requirements to be provided by Owner:**

1. **Owner shall be responsible for hiring a licensed electrician.**
2. **Electrical disconnect switch to be supplied by licensed electrician.**
3. A 120-volt outlet, non-ground fault circuit capable of supplying 1 amp continuously for each compressor and that meets current electrical codes adopted by The State of NH or local Municipality. Location of the outlet(s) shall be within 50' of the BioCon Chamber. (The power required for each compressor is approximately the same as a 100 watt light bulb)

**Following not provided by WAI:**

1. Additional septic tanks.
2. Exterior housing unit for the compressor(s).
3. Exterior Venting may be required for older homes or systems where effluent is pumped to ***THE CLEAN SOLUTION*** system.

All system components supplied by WAI are standard duty rated. Heavy Duty tanks and risers shall be required when the depth of fill exceeds 3 feet but is less than 5 feet. H-20 loaded tanks and risers will be required when the depth of fill is 5 feet or greater and/or is subject to vehicular traffic. Contact WAI for updated pricing for Heavy Duty or H-20 loaded components.

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## OWNER HAS THE FOLLOWING UNDERSTANDING

***THE CLEAN SOLUTION*** system has been designed based on information provide by the owner(s) or owner(s) designer/engineer. Failure to install the subsurface disposal system according to the approved plan will void system warranty and performance specifications. The owner(s) contractor shall ensure that all risers are watertight and all system components, both upstream and downstream of ***THE CLEAN SOLUTION*** system are watertight to prevent infiltration from groundwater and surface runoff. ***THE CLEAN SOLUTION*** system has not been designed to handle backwash discharge from Water Softeners or other high water use fixtures such as hot tubs or spa style showers. WAI recommends that backwash discharge or water from high water use fixtures be discharged into an approved drywell. If the septic system requires an effluent pump to be used to discharge effluent to the dispersal field, WAI recommends that the pump be placed in a separate pump tank external of ***THE CLEAN SOLUTION*** system on an 8" high concrete block. The pump chamber shall be inspected on a two-year cycle for sludge buildup and pumped as necessary to prevent sludge from being pumped to the dispersal field. If the effluent pump is placed within ***THE CLEAN SOLUTION*** system-settling tank then the pump shall be placed on a concrete block that is 8" high and the settling chamber shall be inspected on a yearly basis for sludge buildup and pumped as necessary to prevent sludge from being pumped to the dispersal field. More frequent inspections and pumping may be required based on system loading and occupant use.

## PERFORMANCE SPECIFICATIONS:

This system has been designed based on the following estimated residential wastewater influent strength from the primary treatment tank(s) of 180 mg/l BOD5, 150 mg/l TSS and <5 mg/l FOG. The system is warranted to discharge clean, odor free water to the dispersal field, equivalent or better than 30mg/l BOD5, 30mg/l TSS.

## RIGHTS TO DATA AND ACCESS TO THE SYSTEM

WAI reserves the right of reasonable access to collect data, modify, maintain and repair ***THE CLEAN SOLUTION*** and its subsystems. WAI will retain all data collected and the rights to it.

## DELIVERY

WAI will be prepared to install the system approximately 3 weeks after you have chosen an installer and returned a signed copy of this agreement with the initial payment to WAI. **It is important that WAI be able to coordinate with the installer. Owner to provide WAI with the installer's contact information.**

## TRADE SECRETS

***THE CLEAN SOLUTION*** is the result of the expenditure of much effort and money. The design of the components and operational cycle are the intellectual property of WAI and may not be revealed without written permission.

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## WARRANTY FOR RESIDENTIAL SINGLE FAMILY SYSTEM

*For a period of 10 years, WAI will warranty the components within BioCon™ chamber and repair or replace any of these components, including parts and labor, at no cost to you. This does not cover pumping the system to make necessary repairs.*

*WAI will extend the compressor manufacturer's warranty from two to four years. This covers compressor(s) that have been maintained and used under normal operating conditions. WAI will provide replacement air compressor(s) at cost-plus shipping for compressors not covered under warranty. Labor to replace compressor(s) will be billed out at WAI standard hourly rates.*

*Warranty for pump chamber components (pump, floats, alarms) installed by WAI is limited to the pump / floats / alarm manufacturer's terms and conditions. Labor to replace sump / effluent pump / floats / alarms will be billed out at WAI standard hourly rates.*

*WAI will warranty a dispersal field that utilizes concrete or plastic chambers or conventional pipe and stone dispersal fields designed and constructed to NH Department of Environmental Services and WAI requirements for a period of 5 years. This warranty does not cover system failures caused by water fixture leaks, water overuse, and groundwater leaks or flooding. This warranty is for materials only to replace the dispersal field in-kind and does not cover the cost of landscaping, pumping, relocation or labor.*

*Warranty of all other types of dispersal fields (i.e. fabric style leaching components) is limited to manufacturer's warranty and not covered by WAI or WAI warranties.*

*Owner(s) responsibility during this period is to perform the required maintenance and have an inspection contract with WAI or an approved vendor in effect at all times. Failure to perform the required maintenance, have an inspection contract, and maintain records of pumping or to notify WAI of any problems will void this warranty. This warranty also does not cover damage caused by improper use, poor construction or design practices, high groundwater, flooding or acts of God.*

*THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY OR OTHERWISE, APPLICABLE TO THE SEWAGE TREATMENT SYSTEM SHALL BE LIMITED IN DURATION TO ONE YEAR.*

*WASTEWATER ALTERNATIVES INC. SHALL NOT BE LIABLE FOR ANY DIRECT OR INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. NOR SHALL WASTEWATER ALTERNATIVES, INC. LIABILITY UNDER THIS WARRANTY EXCEED THE PRICE PAID BY THE BUYER TO WASTEWATER ALTERNATIVES, INC. FOR **THE CLEAN SOLUTION SYSTEM**.*

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## PAYMENT

The agreed upon price for the WAI equipment and services detailed in the Sales Agreement is **$8,200.00. ELECTRICAL WORK NOT INCLUDED IN PRICE.**
**($300.00 fee applied to price for tank waterproofing with tank manufacturer applied Conseal 4" Conwrap and Karnak 100 AF waterproofing.)**

**Payment is requested as follows:**
**$4,100.00 upon signing this agreement**
**$4,100.00 immediately upon WAI installing system components.**
**Ownership will transfer to the buyer upon final payment. Failure to pay WAI will void all warrantees.**

The price does not include electrical wiring, excavation to install the components of this system, dispersal field, or connections from the house to ***THE CLEAN SOLUTION*** or to the dispersal field.

**THIS PRICE IS VALID FOR 60 DAYS FROM THE DATE OF THIS DOCUMENT. ALL SYSTEM COMPONENTS MUST BE INSTALLED WITHIN 60 DAYS OF INITIAL DEPOSIT.**

**Please send payment to:**
**Wastewater Alternatives Inc.**
**P.O. Box 670**
**Groton, MA 01450**

**If Paying by Credit Card please call:**
**WAI Accounting Department**
**1-978-448-2280**

**By signing below the owner or owner's representative has read the SALES AGREEMENT and attached INSPECTION CONTRACT requirements and agrees to the terms of the SALES AGREEMENT and to perform the necessary maintenance and inspections as outlined in the INSPECTION CONTRACT.**

## ACCEPTED:

BUYER:

John & Nancy Nelson
28 Colony Cove Road
Durham, NH 03824
Phone:

**DATE:**

SELLER:

***Wastewater Alternatives, Inc.***
Gary R. Spaulding
General Manager

**DATE: May 6, 2009**

# WASTEWATER ALTERNATIVES, INC

2 Whitney Road – Suite 10 - Concord, NH 03301

Telephone: 603-783-8042 Toll Free: (866) 900-2415 Fax (603) 783-4499
www.thecleansolution.com.com email: gary@thecleansolution.com


## RESIDENTIAL
## INSPECTION CONTRACT
## May 6, 2009

| **BUYER:** | |
|---|---|
| Name: | John & Nancy Nelson |
| Address: | 28 Colony Cove Road |
| City, State Zip: | Durham, NH 03824 |
| Phone: | |
| Cell: | |
| Email: | |

**OWNER-IF DIFFERENT:**
Name:
Address:
City, State Zip:
Phone:
Cell:
Email:

| **SITE:** | |
|---|---|
| Property ID: | Tax Map Lot No. |
| Address: | 28 Colony Cove Road |
| City, State, Zip: | Durham, NH 03824 |
| Waterbody: | Little Bay Atlantic Ocean |

**Property Type:**

| | |
|---|---|
| Residential Single Family: | Yes |
| Residential Seasonal: | No |

## MAINTENANCE REQUIRED:

**The following maintenance is required. It is the owner's responsibility to see that this maintenance is performed.**

☒ **Full Time Residential Use (Single Family Home)**

1. Inspection every 2 years by a WAI Technician or by a company or individual that has been certified by WAI to perform inspections.
2. Use a local pumper to pump out the septic and settling/pump tanks every 2 to 3 years. More or less frequent pumping may be required depending on system use and number of occupants. WAI and the pumper can determine the required frequency. Owner must retain records of pumping.
3. Compressor must run continuously. It should be checked for operation at least once a month.
4. BioCon™ chamber may require pumping between 6 and 8 years. WAI Technician will determine if pumping is necessary during inspection.
5. Compressor Air Filter to be cleaned or replaced yearly.

☐ **Seasonal Residential Use (Single Family Home when used less than 6 months per year)**

1. Inspection every 3 years by a WAI Technician or by a company or individual that has been certified by WAI to perform inspections.
2. Use a local pumper to pump out the septic and settling/pump tanks every 2 to 4 years. More or less frequent pumping may be required depending on system use and number of occupants. WAI or the pumper can determine the required frequency. Homeowner must retain records of pumping.
3. Compressor must run continuously. It should be checked for operation at least once a month.

**WASTEWATER ALTERNATIVES, INC**
2 Whitney Road – Suite 10 - Concord, NH 03301

Telephone: 603-783-8042 Toll Free: (866) 900-2415 Fax (603) 783-4499
www.thecleansolution.com.com email: gary@thecleansolution.com

4. Compressor may be disconnected during the off-season.
5. BioCon™ chamber may require pumping between 8 and 10 years. WAI Technician will determine if pumping is necessary during inspection.
6. Compressor Air Filter to be cleaned or replaced yearly.

**Following the above schedule will fulfill your obligations to maintain your warranty.**

The first inspection is included in the sales price. Maintenance Contracts are available from WAI. The service will include a detailed inspection of the system and replacement of any failed items within the BioCon Chamber. Tank pumping is not included in the price and must be arranged by the property owner. Failure to have a maintenance agreement with WAI or an approved vendor will void maintenance warranty outlined in the **Sales Agreement.**

**INSPECTION FEE SCHEDULE**
Single Family Residential Homes – fee is $200.00 per inspection plus the cost of replacement parts not covered by warranty.

Inspection fees may be revised by WAI as needed to adjust cost of services.

Inspection fees will be billed at time of service. Failure to perform inspection or pay for inspection will void WAI warranty.

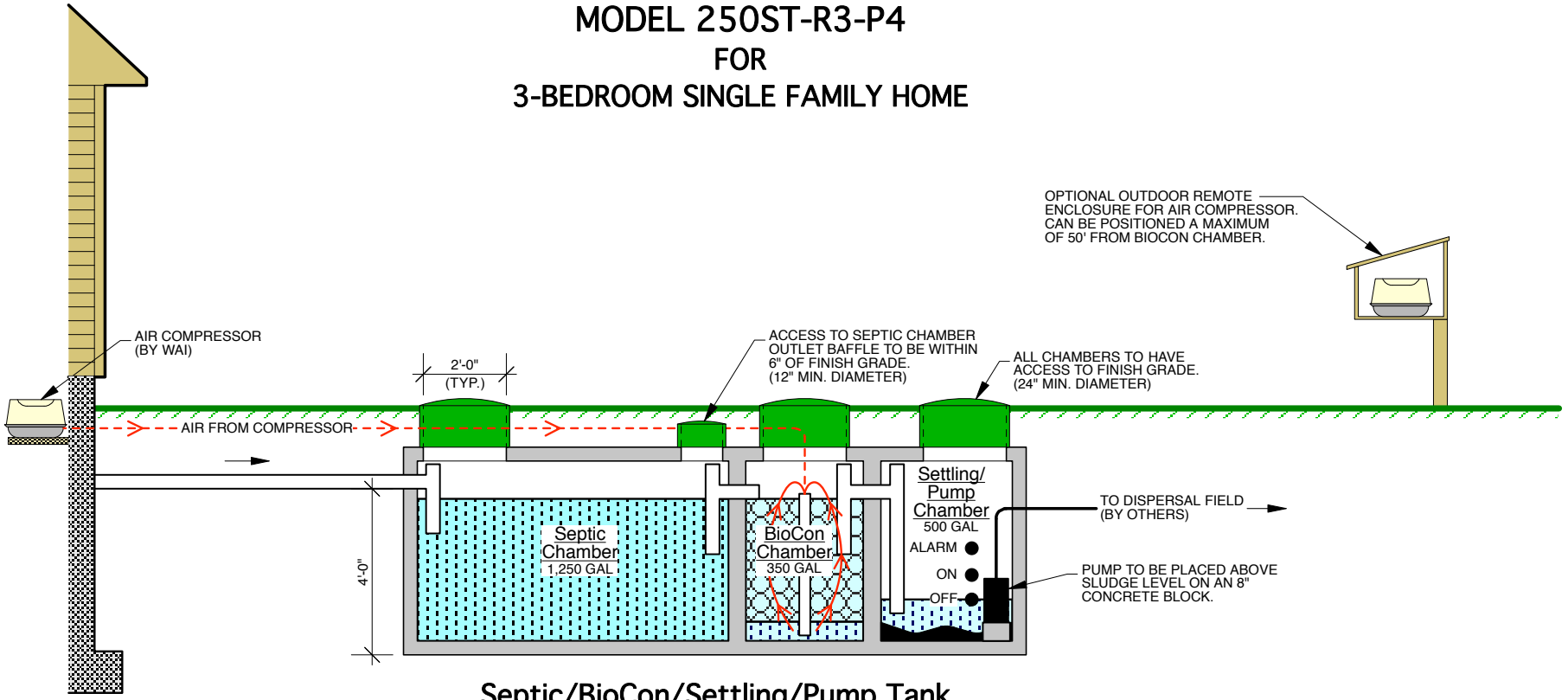
**By signing below the owner or owner's representative has read the above Maintenance requirements and conditions outlined in the SALES AGREEMENT and agrees to perform the necessary maintenance and inspections as outlined.**

**ACCEPTED:**
**BUYER**:

John & Nancy Nelson
28 Colony Cove Road
Durham, NH 03824

**DATE:**

# THE CLEAN SOLUTION™ ALTERNATIVE SEPTIC SYSTEM
# MODEL 250ST-R3-P4
# FOR
# 3-BEDROOM SINGLE FAMILY HOME


OPTIONAL OUTDOOR REMOTE ENCLOSURE FOR AIR COMPRESSOR. CAN BE POSITIONED A MAXIMUM OF 50' FROM BIOCON CHAMBER.
AIR COMPRESSOR (BY WAI)
2'-0" (TYP.)
ACCESS TO SEPTIC CHAMBER OUTLET BAFFLE TO BE WITHIN 6" OF FINISH GRADE. (12" MIN. DIAMETER)
ALL CHAMBERS TO HAVE ACCESS TO FINISH GRADE. (24" MIN. DIAMETER)
AIR FROM COMPRESSOR
Septic Chamber 1,250 GAL
BioCon Chamber 350 GAL
Settling/ Pump Chamber 500 GAL
ALARM
ON
OFF
TO DISPERSAL FIELD (BY OTHERS)
PUMP TO BE PLACED ABOVE SLUDGE LEVEL ON AN 8" CONCRETE BLOCK.
4'-0"

## Septic/BioCon/Settling/Pump Tank

- Provided by WAI -

2,100 GAL 3-Compartment Tank

(15'0"L x 6'6"W x 5'0"H)

## NOTES:

1. Septic & Settling/Pump Compartments must be pumped every 2 to 3 years. More frequent pumping may be required depending on use.
2. Tank is not suitable for drive on use. Heavy Duty and H-20 models available.
3. Contractor to verify tank dimensions prior to setting.
4. Pump to be provided by WAI to meet site conditions. Pump to be placed on concrete block and to have off, on and alarm floats with high water alarm. Pump and alarm to be on separate circuits. Wiring to be provided by site contractor or home owner.
5. Plastic risers will be provided to suite site (up to 24" depth). Contractor to provide additional risers to finish grade if cover over tank exceeds 24".

## Tank from:

A.J. Foss Inc.
Farmington, NH 03835
Tel: 603-755-2515

| Site: | Owner: | Date | |
|---|---|---|---|
| 28 Colony Cove Road<br>Durham, NH 03824 | John & Nancy Nelson<br>28 Colony Cove Road<br>Durham, NH 03824 | 05/06/2009<br>Rev. | WASTEWATER ALTERNATIVES, INC.<br>**THE CLEAN SOLUTION™**<br>11 Hethlon Road<br>Canterbury, NH 03224<br>Tel. 1-866-900-2415 Fax. 603-783-4499<br>www.thecleansolution.com |

250ST-R3-PX_Foss.vwx

© 2009 WASTEWATER ALTERNATIVES, INC.

**WASTEWATER ALTERNATIVES, INC**
*developing innovative solutions with sustainable results*
11 Hethlon Road, Canterbury, NH 03224

Telephone: 603-783-8042 Toll Free: (866) 900-2415 Fax (603) 783-4499
www.thecleansolution.com email: info@thecleansolution.com

# THEORY of *THE CLEAN SOLUTION*

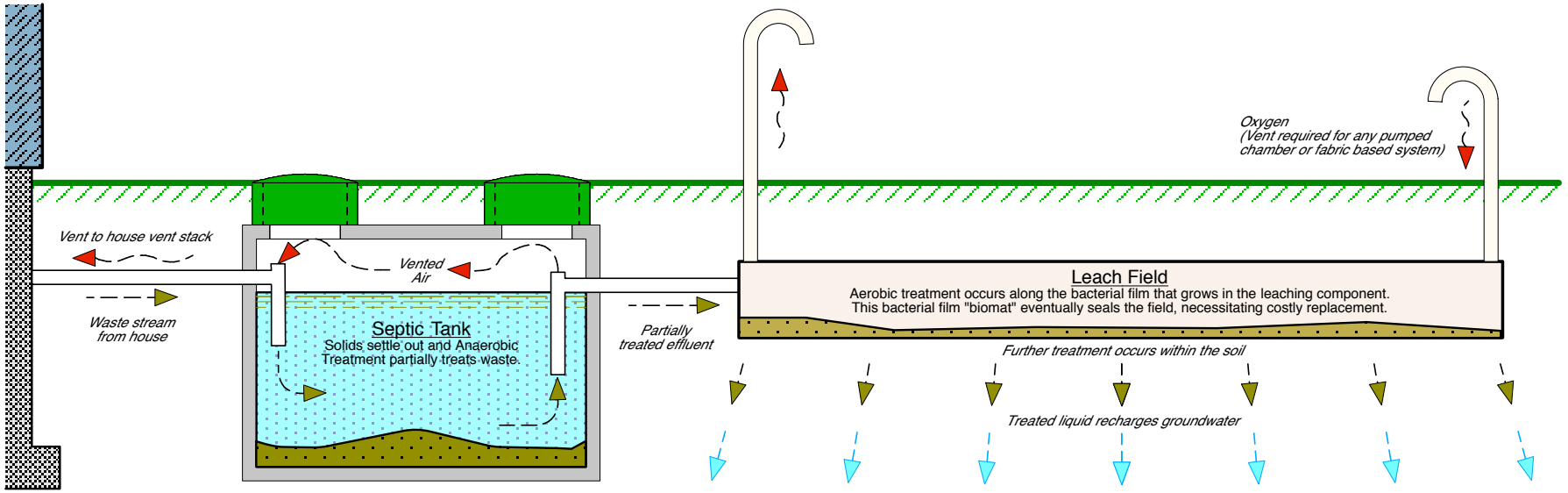
Conventional small to mid-size sewage systems normally use a septic tank followed by a leach field to first provide anaerobic (without air) and then aerobic (with air) treatment of the effluent. Septic tanks work well for capturing and digesting the solids, which are anaerobically fermented over a long period of time, dissolving the solids into the liquid waste. However, a septic tank is not designed to treat the contaminants that dissolve in the liquids. These are treated aerobically in the leach field. Municipal systems, which handle very large volumes of wastewater use different equipment to accomplish the same biological functions: primary sedimentation tanks remove solids, and a subsequent aerobic system treats the contaminants dissolved in the liquids. Settled solids are removed from municipal primary and secondary facilities for further treatment.

All aerobic treatment systems, whether a conventional leach field, municipal treatment plant, or *THE CLEAN SOLUTION*, depend on bacteria to purify the effluent from a solids settling system. In order for bacteria to reproduce they require energy (food) and air. By using the contaminants in the effluent as food and atmospheric air the bacteria metabolize the dissolved solids to carbon dioxide, water and sludge (colonies of bacteria). The aerobic bacteria also convert ammonia compounds to nitrates.

A large number of bacteria need to come in contact with the food source in order to purify an effluent. Treatment systems utilize different methods to provide the necessary bacteria population. A municipal system mechanically stirs up the bacteria in the secondary treatment process so that they will contact their food and not settle out of the effluent. In a leach field, the sludge (biomat) that forms at the ground interface is a large colony of bacteria through which the dissolved solid stream flows. In *THE CLEAN SOLUTION* the bacteria collect in a thin film on the plastic media in WAI'S proprietary BioCon biological contactor, the effluent is circulating over the plastic media several times.

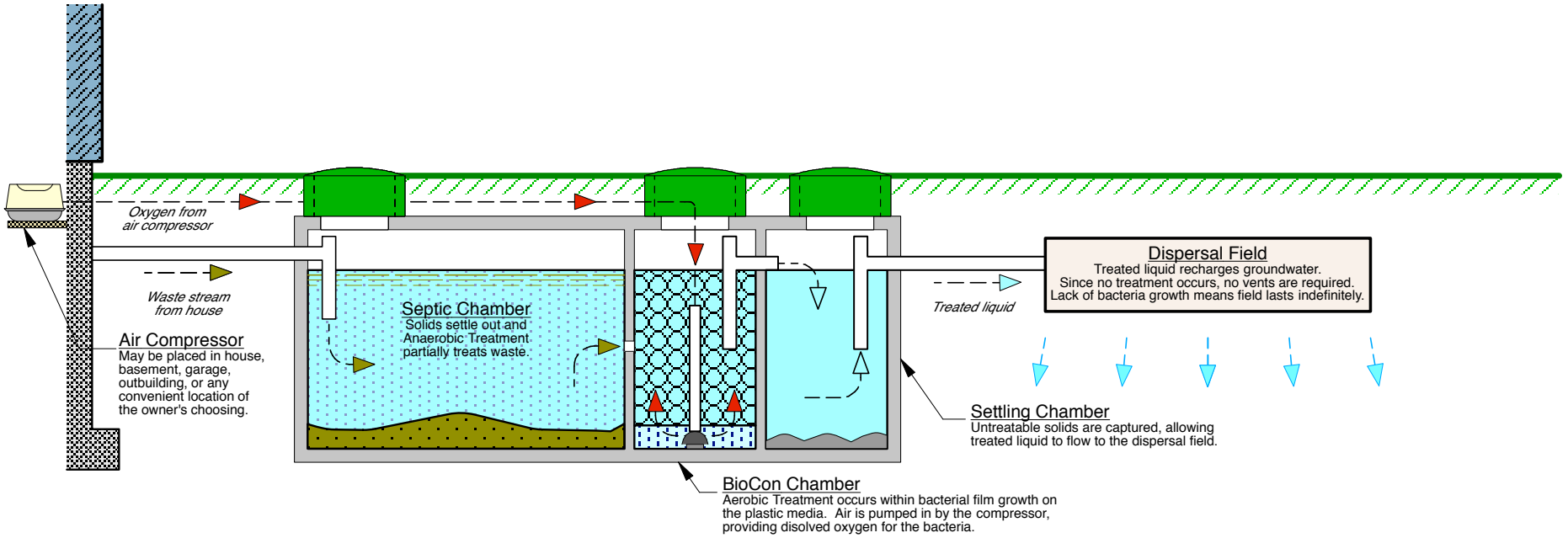
*THE CLEAN SOLUTION* uses the same biological process as a municipal secondary treatment plant utilizing the activated sludge process. Solids are settled out and air is added for bacteria respiration in the BioCon. This allows the bacteria to convert the carbonaceous dissolved solids to carbon dioxide, water and sludge. In addition the urea and ammonia converts to nitrates and sludge. The sludge created is settled for periodic removal from the system, and a clean, odorless effluent is discharged to the dispersal field.

The major difference between a conventional septic system and *THE CLEAN SOLUTION* is where the bacteria (sludge) collect. In a conventional system, the sludge forms in the bottom of the leach field and restricts the effluent flow enough so that the bacteria has time to act. This flow rate through the sludge determines the required field size. In *THE CLEAN SOLUTION* system the sludge is formed in the BioCon chamber resulting in treated, clear effluent discharging to the dispersal field. This field can be greatly reduced in size because there is no for further treatment to reduce BOD and TSS.


Oxygen
(Vent required for any pumped
chamber or fabric based system)
Vent to house vent stack
Vented
Air
Waste stream
from house
Septic Tank
Solids settle out and Anaerobic
Treatment partially treats waste.
Partially
treated effluent
Leach Field
Aerobic treatment occurs along the bacterial film that grows in the leaching component.
This bacterial film "biomat" eventually seals the field, necessitating costly replacement.
Further treatment occurs within the soil
Treated liquid recharges groundwater

## LEACH FIELD BASED SEPTIC SYSTEM

Treatment occurs within the leach field components, whether fabric wrapped pipes or mats, concrete or plastic chambers or traditional pipe & stone.




## THE CLEAN SOLUTION™ ALTERNATIVE SEPTIC SYSTEM

Treatment occurs within the BioCon™ Aerobic treatment chamber, allowing for a dispersal area smaller than a leach field.

WASTEWATER ALTERNATIVES, INC.
**THE CLEAN SOLUTION™**
11 Hethlon Road
Canterbury, NH 03224
Tel. 1-866-900-2415 Fax. 603-783-4499
www.thecleansolution.com

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
Subsurface Systems Bureau
6 Hazen Drive, PO Box 95, Concord, NH 03302-0095
603-271-3501 FAX 603-271-6683

# Site Assessment Form
RSA 485-A:39

RECEIVED
PLANNING, ZONING & CODE ENF.
TOWN OF DURHAM, NH

## A. Property

1. Seller's Name: **DON THOMPSON** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**

2. Agent's Name: **DON L. THOMPSON REAL ESTATE** Street: **10 PETTEE BROOK LANE**
   City/Town: **DURHAM** State: **NH** Zip: **03824** Tel #: **603-868-7332**

3. Assessor's Name: **BRUCE L. POHOPEK** Designer Permit #: **253**
   Street: **42 FLAGG ROAD** City/Town: **ROCHESTER**
   State: **NH** Zip: **03839** Tel #: **603-330-3262**

4. Lot Location:
   City/Town: **DURHAM** Lot #: **23-1** Tax Map #: **12**
   Street: **30 COLONY COVE RD.** Subdivision Name: **N/A PRE 67 LOT**

5. Brief Description of Property and Structures (incl. # bedrooms): **THE LOT IS A 3 BEDROOM RESIDENCE LOCATED ON THE GREAT BAY. THE ORIGINAL SEPTIC APPROVAL # 10720 DATED 6/26/70.**

6. Abutters, if known (attach additional sheet if necessary):
   Name: ___ Mail Address: ___
   Name: ___ Mail Address: ___
   Name: ___ Mail Address: ___

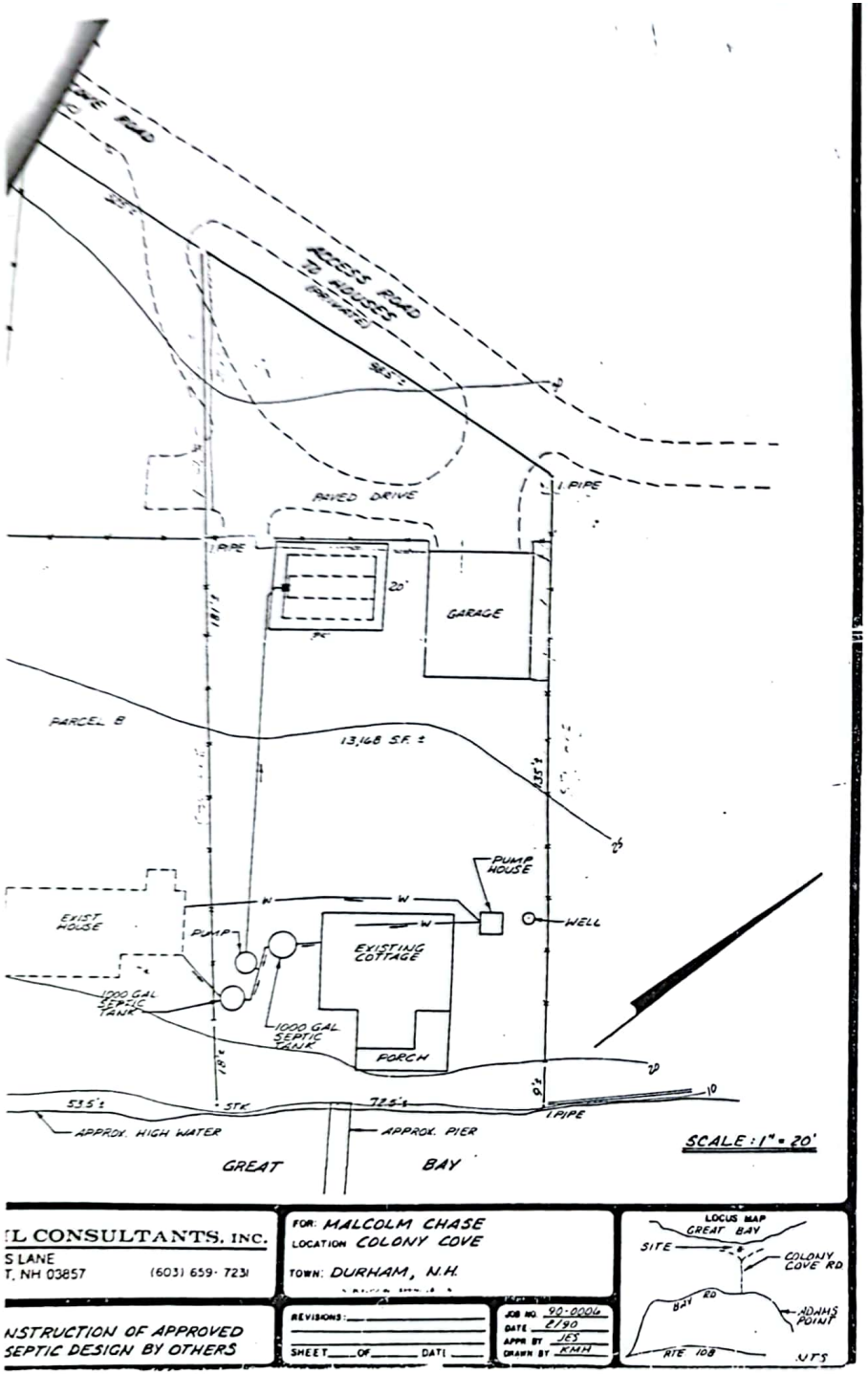
Whole file NOT SCANNED QV

## B. Lot Characteristics

1. Lot Size: **0.50 ACRES ( BY SCALE )**
2. Slope: **A/B SLOPE ( SCS SOILS MAPS )**
3. *Loading Capacity (calculated):* **480 GPD**
4. Water Supply: Well on Lot: **X** Municipal _____ (name)
   Community:_____ (name) Other:
5. Soil Type*: **SCS HCB SOIL GROUP 4, 1.45 FACTOR**
6. Estimated Seasonal High Water Table*: **3' SCS SOIL DATA**
7. *Scope of Review (e.g., written record only, on-site investigation, etc.):* **REV INFORMATION, WRITTEN RECORDS, MUNICIPAL RECORDS AND INVESTIGATION.**

8. Designer=s Assessment of Site for Current Use of System: **THE CURRENT LEACH FIELD IS LOCATED 100'+ FROM THE HWL OF THE GREAT BAY AND APPEARS TO BE FUNCTIONING PROPERLY.**

*From US Natural Resources Conservation Service maps or actual data, if available
Distribution: Original with listing, then to Buyer; 1 copy to Assessor




92352

# APPROVAL FOR OPERATION

N.H. WATER SUPPLY & POLLUTION CONTROL COMMISSION
P.O. BOX 95 HAZEN DRIVE, CONCORD, NH 03301

THE INDIVIDUAL SEWAGE OR WASTE DISPOSAL SYSTEM CONSTRUCTED FOR:

APPROVAL # _____

Owner:

12-24-2

LOT NUMBERS:
SUBD. APPVL.#:
SUBD. NAME:

TYPE OF SYSTEM:

Copy sent to:

TOWN/CITY LOCATION:

STREET LOCATION:

INSTALLER _____ was inspected on (Date) _____
PERMIT # _____ before covering and is hereby approved for use.
☐ OWNER INSTALLED FOR HIS DOMICILE Date Approved: _____

THIS APPROVAL DOES NOT SUPERCEDE ANY EQUIVALENT OR MORE STRINGENT LOCAL ORDINANCES OR REGULATIONS. STATE STANDARDS ARE MINIMAL AND MUST BE MET STATEWIDE.

By: _____
(Authorized Agent of N.H. Water Supply and Pollution Control Commission)

(OVER)

Revised 10/1/80

NOTE: ( ) Gravity system ( X ) Gravity system to septic tank and effluent pump chamber with disposal system to be constructed on a properly prepared base.

Bed bottom to be set: ( ) no deeper than _____" below the original grade
( ) no less than _____" above the original grade
( ) no lower than the original grade

to maintain ( ) _____' minimum above (the reported) (any) seasonal high water table.
( ) _____' minimum above (the reported) (any) ledge depth.
( ) _____' minimum above (the reported) (any) impermeable soil.

( ) Fill to prepare disposal area should be a medium to coarse sand (0.5 to 1.0 mm).

( ) This approval only valid for the above owner's domicile/exemption.

are approved this ~~date~~: _____ By: _____

N.H. Water Supply & Pollution Contrc

Revised 9/1/80

DEPARTMENT OF ENVIRONMENTAL SERVICES
WETLANDS BUREAU
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095
Phone: (603) 271-2147 Fax: (603) 271-6588
Website: www.des.nh.gov/wetlands Email: wetmail@des.nh.gov

# Standard Dredge and Fill Application Form

**The Standard Dredge and Fill application package to be submitted to DES consists of:**

1. Application form (this document).
2. Checklist(s) with required information attached. ("Checklist for Submission of your Standard Dredge and Fill Application," and if appropriate, "Compensatory Mitigation Information and Checklist").

Type or print clearly -- missing information may result in your application review being delayed if it is considered administratively incomplete. If you are completing this as a Word version on your computer, use your **tab key** to move through the document to enter data in the appropriate areas.

If you have questions about any terms used, check the Definitions section of the Instructions.

| 1. | Name of Landowner* (last, first, middle initial) | Owner daytime phone number | Owner fax number | Owner email |
|---|---|---|---|---|
| | Nelson, John | ( 603 ) 868-1582 | ( ) | |

* If there are multiple landowners, please attach a separate page with the names of all landowners, and documentation as to the one person who represents the interests of the entire group.

| Landowner (permanent) mailing address or PO Box | Town/City (owner mailing address) | State | Zip code |
|---|---|---|---|
| 28 Colony Cove Road | Durham | NH | 03824 |

| 2. | Name of Applicant, if not the landowner | Applicant phone number | Applicant fax number | Applicant email |
|---|---|---|---|---|
| | | ( ) | ( ) | |
| | **Applicant street address** | **Applicant town/city** | **State** | **Zip code** |
| | | | | |

| 3. | Company and Name of Agent | Agent phone number | Agent fax number | Agent email |
|---|---|---|---|---|
| | Stockton Services, Anne W. Bialobrzeski | ( 603 ) 929-7404 | ( ) | stockton@ttlc.net |

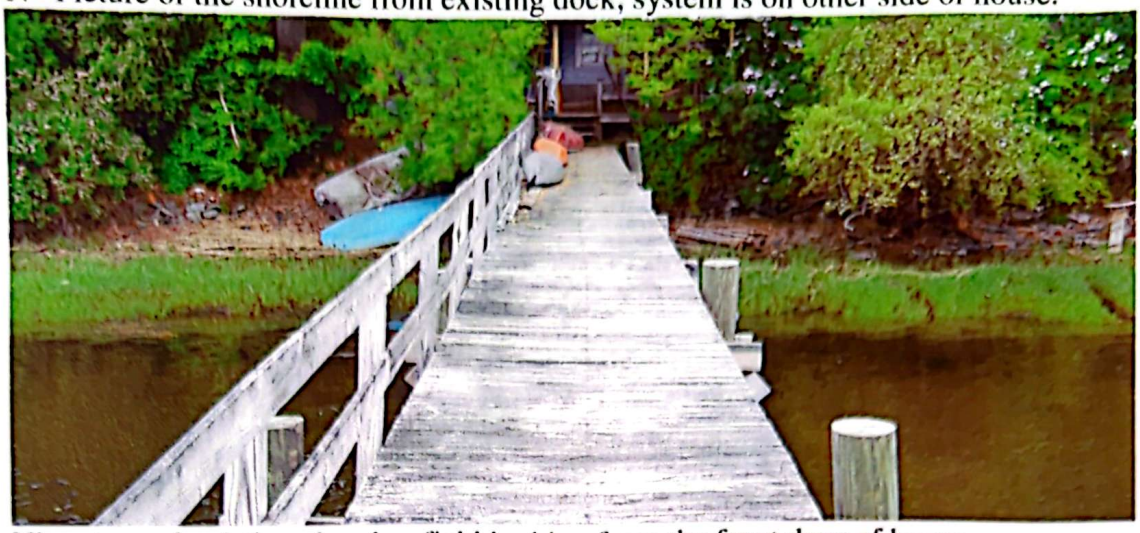
| Agent Street mailing address or PO Box | Town/City (agent mailing address) | State | Zip code |
|---|---|---|---|
| PO Box 1306 | Hampton | NH | 03843-1306 |

| 4. | Location(s) of the proposed work (fill in below) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Street address(es) or nearest intersection(s) | | | 28 Colony Cove Road | | | |
| | Town/City | Durham | Tax map | 12 | | | 24-2 |
| 5. | For projects classified as minor or major impact, are th | | | | | y? | Circle one: N/A |
| | If "Yes," identify and label the location(s) of vernal pool(s | | | | | | |

Whole file NOT SCANNED QV

Nelson 5/18/09

Picture of the shoreline from existing dock, system is on other side of house.



View toward existing chamber field looking from the front door of house.

View of area where septic tank will be replaced.

Barstow

3117-747 ↑ 12/17/2004

Donald L Thompson Thompson Family Trust

5/31/91 ↑ 1556-178

Charlotte E Chase

Feb 23, 1990 ↑ 1495-622

Malcom Chase

↑ 7/1/87

1323-683

Print #24 Chase Ent

↑ 12/21/72 918-116

Mal Chase ✓

checked for TOR well release Ø

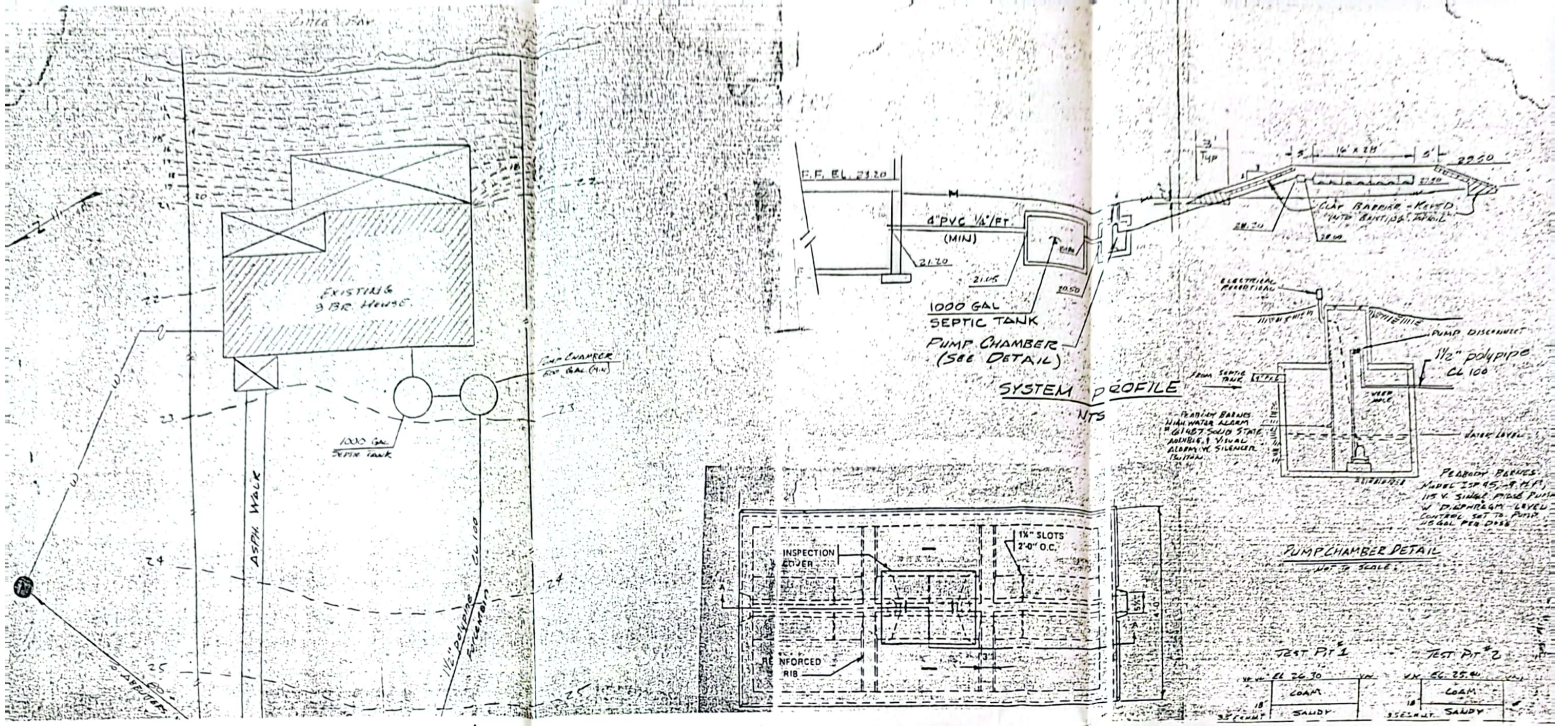
~~Angie Brentwood~~

~~Tax~~

~~N75 - Oscar Jewell Brentwood~~

Karen 868-8064

30-colony




TEST PITS TAKEN 10/8/80
PERC TEST TAKEN RESULTS 8 MIN/INCH
18" DEEP

CONSTRUCTION NOTES

1. Leaching chambers shall be set on sand fill.
2. Perimeter of chamber field shall be lined with no less than 18" of ¾" to 1½" washed stone.
3. Chambers shall be installed according to manufacturers instruction.

DESIGN NOTES:

Percolation Rate: 8 MIN/INCH
Design Perc. Rate: 8 MIN/INCH
Hydraulic loading/Bedroom: 150 G.P.D.
Number of Bedrooms: 3 BR
Required leaching area: 450 SQ. FT.
Leaching area provided: 450 SQ. FT.

Nearest abutting well: 80'+
Nearest water body: 110'+
Foundation drains No
Soil classification: BURTON SILT LOAM USDA-SCS type B&B

BENCH MARK: TOP OF IRON PIPE EL. 28.33'

N.H.W.S.&P.C.C. APP. NO. 92362

# SUBSURFACE DISPOSAL SYSTEM FOR CHASE ENTERPRIZE INC. IN DURHAM, N.H.

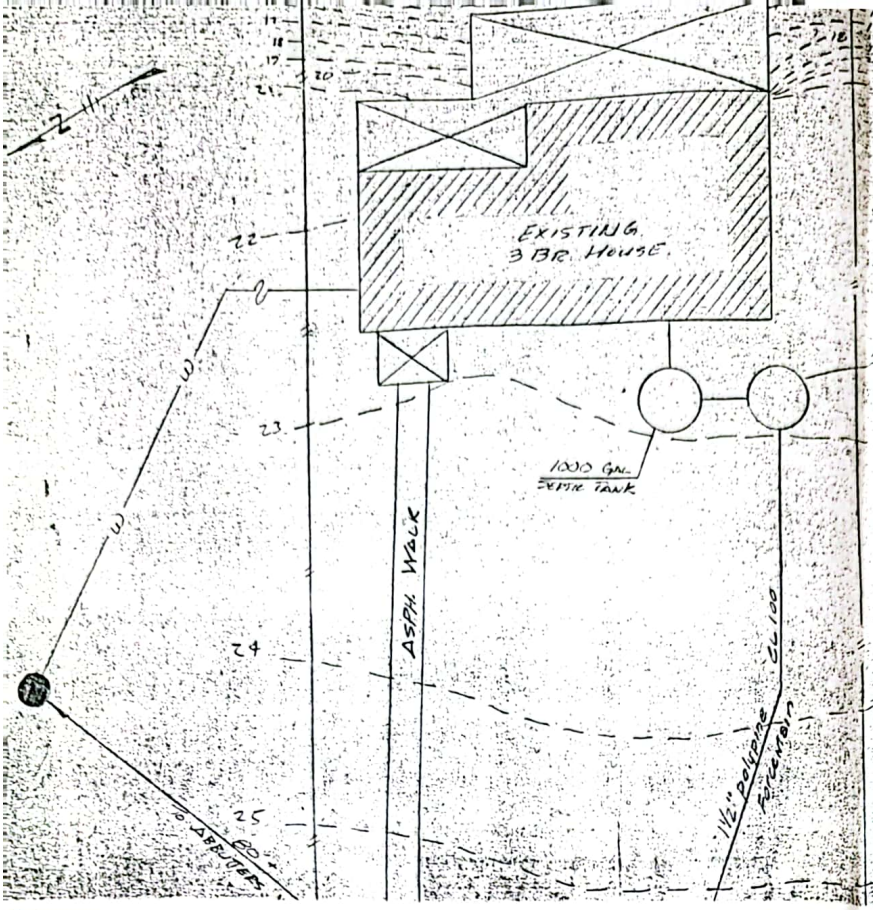
KIMBALL CHASE company, inc.
40 Bridge Street
Portsmouth
New Hampshire 03801
603 431-2520

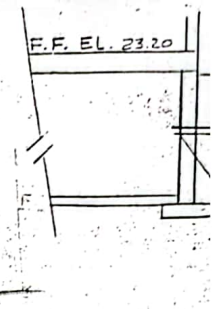
SHEET NO. 1

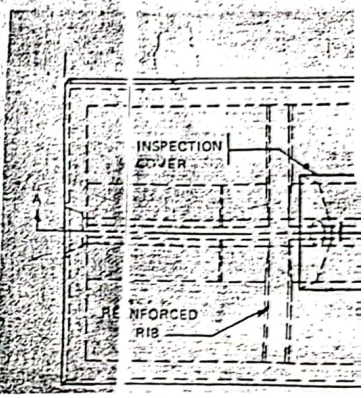
DRAWN BY S.O.N.
SCALE 1"=10'

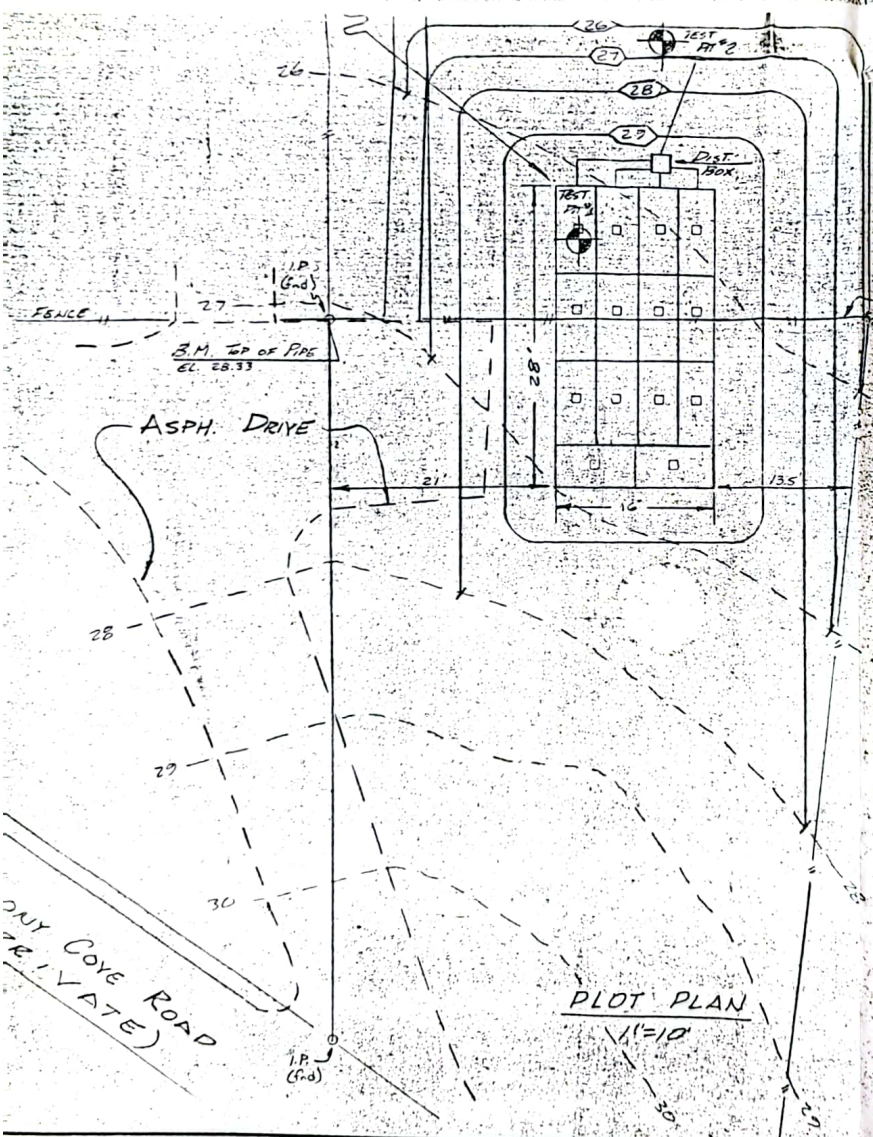
APPROVAL HAS BEEN GRANTED OR IS IMMINENT FOR SUBJECT CONSTRUCTION. SHALL EXPIRE 4 YEARS FROM THE DATE OF ISSUE, UNLESS AN OPERATIONAL

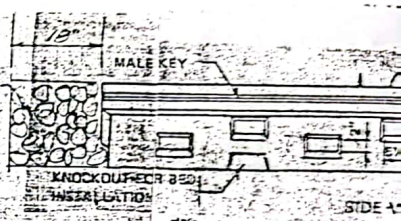
4/3/81




3/4" to 1½" stone (periphery only)

CONSTRUCTION NOTES

1. Leaching chambers shall be set on sand fill.
2. Perimeter of chamber field shall be lined with no less than 18" of 3/4" to 1½" washed stone
3. Chambers shall be installed according to manufacturers instruction.

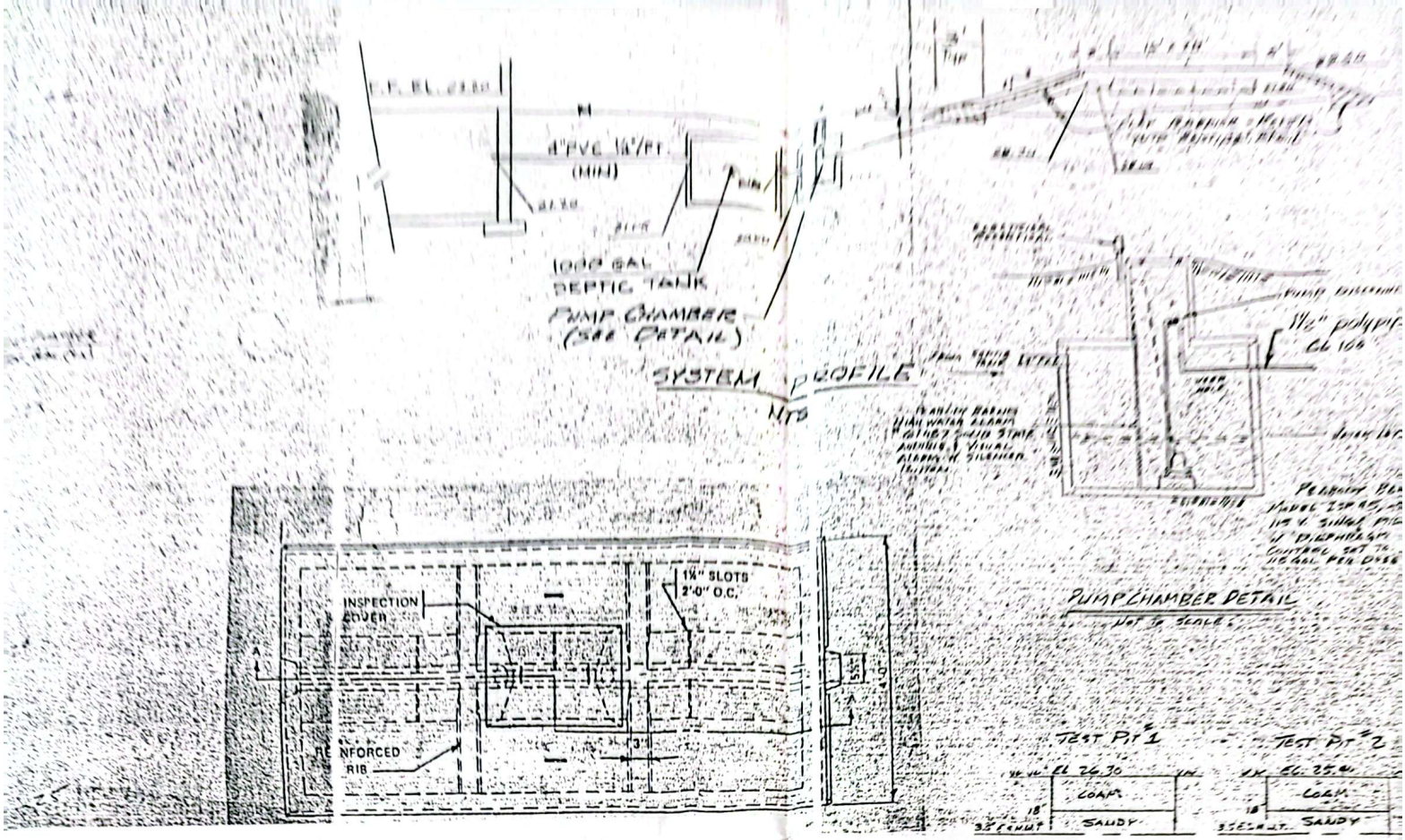
DESIGN

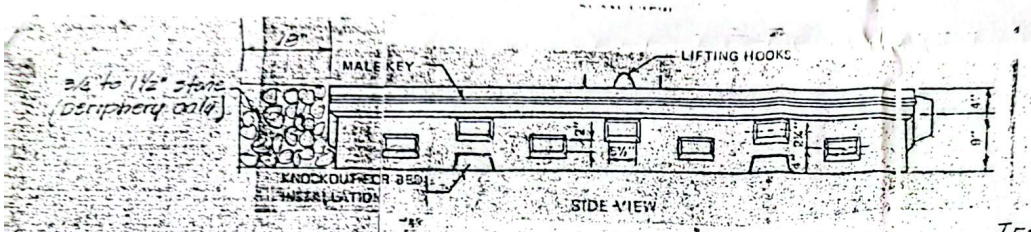
Percolatio
Design
Hydraulic
Number
Required
Leaching

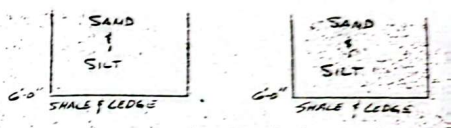
Nearest
Nearest
Foundatio
Soil clas
US

BENCH M

N.H.W.S. & P.




TEST PITS TAKEN 10/8/80
PERC TEST TAKEN RESULTS 8 min/inch
18" DEEP

Fence To Be Removed

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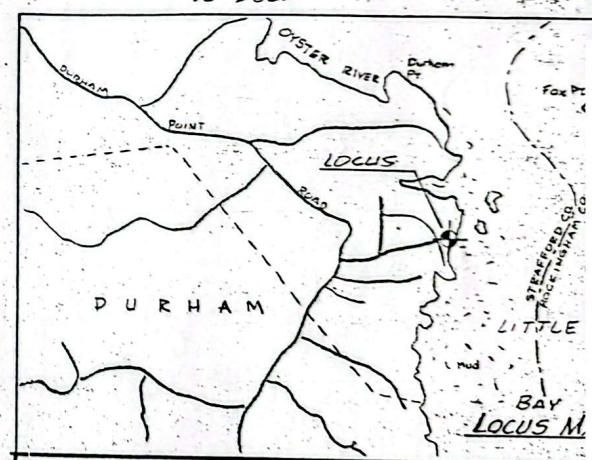


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SHE

N.H.W.S. & P.C.C. Ap. No. 92352

WS 1003.07 (a) ALL CONSTRUCTION APPROVALS ISSUED BY THE COMMISSION SHALL EXPIRE 4 YEARS FROM THE DATE OF ISSUE, UNLESS AN OPERATIONAL APPROVAL HAS BEEN GRANTED OR IS IMMINENT FOR SUBJECT CONSTRUCTION.

4/3/

install the system for his domicile/exemption.